

## **Introduction - Summary of Key Outcomes**

This Draft Statement of Commitments has been prepared in accordance with section 75F (6) of the EP&A Act.

The inclusion of appropriate environmental management measures into the detailed design and construction of the project would minimise adverse impacts on the environment. The proposed adoption of the relevant measures identified in the Draft Statement of Commitments into a Construction Environmental Management Plan (CEMP) and Operation Environmental Management Plan (OEMP) would be an important component of the proposal and reiterate the commitment of IPRA and its contractors to mitigation of environmental impacts identified in this assessment.

The Draft Statement of Commitments describes the environmental management and monitoring to be undertaken during the construction and operation of the Buronga Peaking Power Plant.

## 19.1 Introduction

This section details the Draft Statement of Commitments in accordance with section 75F (6) of the EP&A Act.

The inclusion of appropriate environmental management measures into the detailed design and construction of the project would minimise adverse impacts on the environment. The proposed adoption of the relevant measures identified in the Draft Statement of Commitments into a Construction Environmental Management Plan (CEMP) and Operation Environmental Management Plan (OEMP) would be an important component of the proposal and reiterate the commitment of IPRA and its contractors to mitigation of environmental impacts identified in this assessment.

The Draft Statement of Commitments describes the environmental management and monitoring to be undertaken during the construction and operation of the Buronga Peaking Power Plant.

## 19.2 Environmental Management

### 19.2.1 Construction Environmental Management Plan

Environmental management during the construction phase of the proposed project would be undertaken in compliance with the requirements of a Construction EMP (CEMP).

The CEMP is an administrative tool outlining environmental management practices, safeguard measures to be implemented, timing of their implementation, and management and monitoring of the process and procedures. The CEMP must be adhered to during the construction of Buronga Peaking Power Plant Project.

The key objectives of the CEMP would include:

- ensuring that works are carried out in accordance with appropriate environmental statutory requirements, the conditions of approval for the project, relevant guidelines and existing environmental management systems and procedures at the peaking power plant;
- ensuring that works are carried out in accordance with the goals and requirements presented in the Environmental Assessment;
- ensuring that works are carried out in such a way as to minimise the likelihood of environmental degradation occurring;
- ensuring that works are carried out in such a way as to manage the impact of the works on neighbouring land uses;
- ensuring that all employees in the works comply with the terms and conditions of the CEMP;
- providing clear procedures for management of environmental impact including corrective actions; and
- identifying management responsibilities and reporting requirements to demonstrate compliance with the CEMP.

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The CEMP would serve as a working document to be used during the implementation of the proposal. Generally the Construction EMP includes:

- establishment of environmental goals and objectives;
- conditions of project approval;
- lists of actions, timing and responsibilities;
- identification of areas of responsibility for environmental management of the project;
- statutory requirements – licences and approvals required;
- a structured reporting system detailing all relevant matters on a regular basis;
- procedures and forms for documentation and reporting of issues;
- training of personnel in environmental awareness;
- guidelines for emergencies, contact names and corrective actions for non-conformance and notifications to appropriate authorities and affected parties;
- auditing implementation of the CEMP;
- review procedures and protocols for modification of the CEMP;
- complaint handling procedure;
- site management and control procedures; and
- monitoring procedures.

Specifically, the CEMP would provide management actions in relation to:

- erosion and sediment control;
- surface water management;
- waste generation and disposal;
- flora and fauna management;
- Aboriginal cultural heritage;
- the control of atmospheric emissions;
- the control of construction traffic movements; and
- the control of noise emissions.

### 19.2.2 Operational Environmental Management Plan

An Operational EMP (OEMP) would be prepared for the Buronga Peaking Power Plant, which would address the key ongoing monitoring requirements. The OEMP for the operational phase would include information on:

- details of proposed maintenance and monitoring programs;
- responsibility for maintenance and monitoring;
- reporting requirements;
- permits, approvals and consents issued under the approval process;
- community liaison such as complaints registers and a 24-hour hotline;
- the appropriate standards and protocols for the necessary controls, monitoring and remediation measures;
- bushfire management controls and procedures and Asset Protection Zone management;
- auditing procedures;
- response plans for contingency events;
- properly established operating procedures;
- environmental training and education at all levels;
- monitoring system, review of plans and progress toward achieving objectives and goals;
- non-compliance handling procedures; and
- environmental quality controls.

### 19.3 Environmental Safeguards

A number of environmental safeguards and mitigation measures to prevent or minimise environmental impacts that may be generated by the construction and operation of Buronga Peaking Power Plant are proposed. These measures would be incorporated in both EMPs and implemented throughout the life of the project.

**Table 19-1** summarises these safeguard measures and sets out priorities for implementation (construction and operation). IPRA would accept responsibility for ensuring that these safeguard procedures are undertaken.

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Table 19-1 Summary of Mitigation Measures and Commitments

Item	Mitigation Measures and Commitments	Implementation
<b>General</b>		
A1	IPRA would carry out construction and operation generally in accordance with the Project application, the EA and this Draft Statement of Commitments.	Design, Construction and Operation
A2	IPRA would ensure that all buildings are constructed generally in accordance with the plans provided as part of the EA, the Building Code of Australia and the relevant parts of the EP&A Act building certification.	Design and Construction
A3	IPRA would ensure that all practicable measures are implemented to prevent or minimise any impacts to the environment that may arise from the construction, commissioning and operation.	Design, Construction and Operation
A4	The Buronga Peaking Power Plant would operate as a peaking plant for up to 10% of the year and in accordance with the Environmental Licence associated with Approval of the project.	Design and Operation
A5	IPRA would prepare and implement: Construction Environmental Management Plan (CEMP); and Operational Environmental Management Plan (OEMP).	Construction and Operation
<b>Heritage</b>		
B1	The CEMP and OEMP would be developed and implemented to address heritage issues. The CEMP would detail the management strategies to be followed in the event that an Aboriginal object or non Aboriginal archaeological relic is uncovered during construction.	Design, Construction and Operation
<b>Soils, Geology and Groundwater</b>		
C1	A nominal cross-fall shall be applied to the platform to provide adequate site surface drainage.	Design and Construction
C2	Assess need for groundwater control and collection system.	Design
C3	Where practicable, material excavated from the site (except for say 150 mm of topsoil and root-affected material) would be suitable for use as engineered fill in any cut/fill operations.	Design and Construction
C4	Where fill is proposed to be beneath structures, it is anticipated that it would be compacted to 98% (Standard) dry density ratio at a moisture content in the range (Optimum Moisture Content $\pm 2\%$ ). In areas where fill is not planned to be used as a permanent structural foundation, compaction to 95% standard would be suitable.	Design and Construction
C5	A Construction Soil and Water Management Plan would be developed and implemented for the construction works to ensure effective management of potential soil and erosion issues.	Design and Construction
C6	Construction would be planned to minimise the time that disturbed land is exposed.	Construction
C7	Disturbed areas would be quickly revegetated or covered with a non-erodible surface following construction.	Construction
C8	During the construction period water may be required for dust suppression.	Construction
C9	Provision of an impermeable liner for the stormwater and wastewater storage ponds.	Design and Construction
C10	Discharge from the stormwater pond would be through an appropriately designed dissipating structure to minimise soil erosion potential.	Design and Operation

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Item	Mitigation Measures and Commitments	Implementation
C11	Appropriately bunded areas would be included for storage of fuels, oils and chemicals.	Construction and Operation
C12	Areas within the operational plant area would be appropriately drained so that surface runoff would be prevented from infiltrating directly onto the ground and from reaching the groundwater.	Design, Construction and Operation
<b>Visual</b>		
D1	Colour and texture of structures in the Buronga Peaking Power Plant would be selected to blend with the surrounding landscape and utilise non-reflective materials	Design and Construction
D2	Tree and shrub planting would be carried out around the proposed facility to provide additional screening to views from surrounding areas.	Operation
D3	Plant lighting would minimise direct lines of sight from the proposed facility to the Arumpo Road.	Design and Operation
D4	The tops of the exhaust stacks will not have permanent flood lighting attached to them.	Design and Operation
D5	Large floodlights would not be used other than for emergency lighting.	Design and Operation
D6	Security lighting spill from the plant would be minimised.	Design and Operation
<b>Traffic</b>		
E1	Construct a new access road to the site with the design requirements for a 19m Semi trailer truck.	Design and Construction
E2	Undertake further assessments to identify and cater for any necessary remedial treatments to facilitate passage of over-dimensional/over-mass transport once the actual weight and dimensions of the proposed plant equipment are known.	Design
E3	Development and effective implementation of a Traffic Management Plan during construction and implementation of a Construction Environmental Management Plan (CEMP).	Construction
E4	The Traffic Management Plan would comply with all relevant Regulations and By-Laws and in particular address "long" and "heavy" load movements.	Construction and Operation
<b>Preliminary Hazard Analysis</b>		
F1	The detailed design of the distillate-fired gas turbine enclosure and associated equipment would clearly outline the basis of safety used to ensure that the explosive situations do not arise (the risk is rendered negligible).	Design
F2	Fire protection inside the gas turbine enclosure to be determined, including use of explosion panels and use of fire retardant material where required by design standards.	Design
F3	The site as a whole will be monitored by infra red beam heat detectors to ensure fire protection and management systems for the site are activated in case of fire from adjoining land. The distillate tanks will be equipped with fire detection instrumentation, stationary sprinkler system and transportable foam mixing equipment and fire pump. The transportable distillate fired fire pump and foam mixing equipment will provide a wider fire protection capability across the site.	Design and Operation
F4	The site will be equipped with a reserved 150kL supply of "Fire Protection Water" with up to 2,000kL of additional plant process water in storage tanks. In addition, water from the on site stormwater collection pond will also be available for fire fighting and control.	Design and Operation

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Item	Mitigation Measures and Commitments	Implementation
F5	Carry out an assessment of the safety management system implemented and used at the site, specifically as it applies to the proposed hazardous materials handling, fuel reticulation and storages within the first year of operation.	Operation
F6	Operational safety systems should ensure that any removal of critical safety function (e.g. for repair or exchange) is subject to prior scrutiny by competent plant management.	Design and Operation
<b>Socio Economic</b>		
G1	Where commercially practicable, local contractors and supply companies would be utilised for the provision of labour and services during the construction phase and subsequent operation and maintenance of the peaking power plant.	Construction and Operation
<b>Bushfire</b>		
H1	Each gas turbine enclosure would be equipped with infra red fire detectors, fixed heat detectors and fuel spill sensors mounted at the base of the turbine units. The enclosure would be protected with carbon dioxide or similar non ozone-depleting fire suppression and sprinklers to provide fire detection and suppression in the unlikely event of a fire within the turbine enclosure.	Design and Operation
H2	The site as a whole would be monitored by infra red beam heat detectors to ensure fire protection and management systems for the site are activated in case of fire from adjoining land. The distillate tanks would be equipped with fire detection instrumentation, stationary sprinkler system and transportable foam mixing equipment and fire pump. The transportable distillate fired fire pump and foam mixing equipment would provide a wider fire protection capability across the site.	Design and Operation
H3	Distillate storage would be managed in accordance with the requirements of the Occupational Health and Safety Act 2000 and the Occupational Health and Safety Regulation 2001. The distillate tanks would be installed in accordance with relevant WorkCover requirements and Australian Standard AS1940:2004 Storage and Handling of Flammable and Combustible Liquids.	Design & Operation
H4	The site would be equipped with a dedicated 150kL of reserved "Fire Protection Water" with up to 300kL of additional plant process water in storage tanks. In addition, water from the on site stormwater collection pond would also be available for fire fighting and control.	Design and Operation
H5	Asset Protection Zone Management would be incorporated within long term site management plans. This would include internal monitoring and fuel management programs; removal of leaf litter on an annual basis prior to the fire season; removal of any weed species present; management and trimming of trees and other vegetation in the vicinity of power lines in accordance with the 'ISSC 3 Guideline For Managing Vegetation Near Power Lines' specifications issued by ISSC.	Design, Construction and Operation
<b>Water Management</b>		
<b>Soil Erosion</b>		
I1	All construction works would be undertaken in a manner to minimise the potential for soil erosion and sedimentation.	Construction
I2	At a minimum the measures outlined in the <i>Managing Urban Stormwater – Vol 1 Soils and Construction</i> would be implemented. Measures may include: <ul style="list-style-type: none"> <li>- installation of sediment filters and</li> <li>- the construction of a sedimentation basin on site</li> </ul>	Design and Construction

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Item	Mitigation Measures and Commitments	Implementation
I3	Soil erosion and sedimentation devices would remain in place until the surface is restored. These devices would also capture any gross pollutants.	Construction and Operation
I4	Disturbed sites would be suitably revegetated or covered with a non-erodible surface as soon as practicable following construction.	Construction
<b>Spill and Site Management</b>		
I5	All potential pollutant materials would be stored in appropriate containers in designated areas and where required these areas will be bunded.	Construction and Operation
I6	Appropriately bunded areas would be included for storage of distillate, oils and minor quantity of chemicals.	Construction and Operation
I7	Waste collection areas would be designated.	Design, Construction and Operation
I8	Waste collection and disposal would be undertaken by a licensed contractor.	Construction and Operation
I9	All major vehicle maintenance would be undertaken offsite or in appropriately managed site areas.	Construction and Operation
I10	Any vehicle washing on-site would be restricted to specific bunded areas or otherwise-managed site areas.	Construction and Operation
I11	Staff facilities would be provided and installed and maintained so that pollutants, including wash water are not conveyed from the site in stormwater.	Construction and Operation
I12	Water may be required for dust suppression and would be of a quality that represents no health risk.	Construction
<b>Surface Water</b>		
I13	Treatable stormwater would be reused at the site. No contaminated effluent will be discharged to local waterways.	Design, Construction and Operation
I14	Water management strategies developed and implemented to ensure nominated peak flows discharging from the site do not exceed existing flows.	Design, Construction and Operation
I15	Cut-off drains would be constructed to divert overland flows around the site. The outlets of the cut-off drains would be designed to maximise the dispersion of flow.	Design, Construction and Operation
<b>Wastewater Treatment</b>		
I16	All process wastewater will be collected in the wastewater pond and evaporated into the atmosphere or disposed of offsite to approved receptors if required.	Design and Operation
I17	Waste solids and sludge would be removed from site and disposed of by a licensed contractor.	Construction and Operation
I18	All domestic wastewater during construction would be collected and disposed of offsite by a licensed contractor.	Construction
I19	Domestic and general purpose use 'black' and 'grey' water during operations would be treated by a zero discharge proprietary treatment system or stored and disposed of offsite by a licensed contractor.	Design and Operation
I20	Bund water would pass through an interceptor pit which would discharge into the wastewater pond.	Operation
I21	Stormwater would be directed into the site stormwater pond where detention and sedimentation would occur.	Design and Operation

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Item	Mitigation Measures and Commitments	Implementation
<b>Flora and Fauna</b>		
J1	Large floodlights would generally not be used, although some lights may be required for emergency lighting.	Design and Operation
J2	Security lighting would be designed not to direct light outside the property boundary.	Design and Operation
J3	Development and implementation of Groundcover Clearance Protocol to reduce impact to habitat values of area.	Construction
J4	Development and implementation of a Pre-clearance Survey to locate fauna to reduce direct impacts to any ground or tree dwelling fauna species.	Construction
J5	Development and implementation of Tree Clearance Protocol to reduce direct impacts to any tree dwelling fauna species.	Construction and Operation
J6	Develop and implement a Weed and Pest Management Plan as part of the CEMP and OEMP for the site. The plan would include active control of Noxious weeds.	Construction and Operation
J7	Implement site management practices such as: <ul style="list-style-type: none"> <li>- Setting maximum speed limits during construction and operation traffic on site to reduce fauna road fatalities;</li> <li>- Limit vehicular and personnel entry into adjacent remnant vegetation during construction and operation through appropriate fencing; and</li> <li>- Using down-lights and motion sensor lighting in order to reduce light spill and the associated secondary impact on nocturnal fauna species potentially utilising the adjacent vegetation.</li> </ul>	Construction and Operation
J8	Revegetation and Landscaping of the plant site. Species selected to be representative of local provenance. Revegetated and Landscaped areas to be monitored for weed infestation and any infestations actively managed.	Design, Construction and Operation
<b>Noise</b>		
K1	A Construction Noise Management Plan is to be developed to confirm assumptions made in the assessment and to investigate reasonable and feasible noise mitigation measures if necessary.	Design and Construction
K2	The Construction Noise Management Plan would consider, if appropriate, <ul style="list-style-type: none"> <li>- Selection of quiet plant and processes;</li> <li>- Retrofitting reversing alarms that are quieter and display less annoying characteristics, such alarms include "smart alarms" and "quacker alarms";</li> <li>- Use of temporary barriers;</li> <li>- Positioning of plant / processes; and</li> <li>- Limiting the "clustering" of plant / processes.</li> </ul>	Design and Construction
K3	Plant selection and detailed design processes would evaluate noise mitigation options based on the noise limits identified in this noise assessment.	Design
K4	Plant manufacture to incorporate the features as determined necessary by the detailed design process to meet noise criteria at the relevant receptors.	Design and Construction

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Item	Mitigation Measures and Commitments	Implementation
K5	Post-commissioning, the plant noise outputs would be measured to demonstrate that actual noise emissions meet noise criteria at the relevant receptors.	Operation
<b>Air Quality</b>		
L1	As part of the detailed design of the development, the assumptions and emission estimates used in this assessment will be reviewed and should the expected emission rates or stack details increase over the values used here, the modelling will be revised to ensure that DECC air quality standards and goals will be met.	Design
L2	Throughout the design process, opportunities to minimise emissions to air will be investigated and implemented wherever practicable to ensure that off-site impacts are kept to a minimum.	Design
L3	Liaise with CASA to address the issue of potential aviation hazard of the plant.	Design
L4	Any emissions of dust particulates during construction would be specifically controlled through the implementation of mitigation measures, which would be incorporated into a Construction Environment Management Plan (CEMP).	Design and Construction
L5	<p>The CEMP would consider the most appropriate dust mitigation method suited to the activity and circumstances. This may include:</p> <ul style="list-style-type: none"> <li>• watering, spraying or covering earthworks during excavation and handling and on exposed surfaces and stockpiles;</li> <li>• scheduling activities for more favourable meteorological conditions;</li> <li>• ceasing earthmoving activities when wind speeds exceed 30 km/hr;</li> <li>• covering or limiting truck soil loads;</li> <li>• reducing speed limits on unsealed surfaces;</li> <li>• cleaning soil off the undercarriage and wheels of trucks</li> </ul>	Construction
L6	Any long-term soil stockpiles would be stabilised using measures such as fast seeding grass or synthetic cover spray.	Construction