



DOC19/995044-50

Department of Planning, Industry and Environment
Via Email: mandana.mazaheri@planning.nsw.gov.au

18 November 2020

Attention: Mandana Mazaheri

Dear Ms Mazaheri

I refer to your email of 11 November 2020 in relation to draft conditions for Newcastle Power Station proposed to be built at Tomago NSW (SSI-9837). Reference is also made to the meeting of 12 November 2020 held with the proponent AGL Energy Limited (AGL) and Department of Planning, Industry and Environment.

The Environment Protection Authority (EPA) has considered AGL's draft conditions and comments made at meeting of 12 November 2020 and now provides in Attachment A, for consideration by the Department of Planning, Industry & Environment, recommended Conditions of Approval. For ease of reference these conditions are provided in a table referencing AGL's proposed draft conditions.

If you have any questions about this matter, please contact Jenny Lange on 02 4908 6891 or by email to hunter.region@epa.nsw.gov.au.

Yours sincerely

A handwritten signature in blue ink, appearing to read 'Mark Hartwell', written over a horizontal line.

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Attachment A: Recommended Conditions of Approval

Proposed draft condition	EPA comment	EPA recommended conditions
EPA 1	No change to original	Noise generated at the premises must not exceed the noise limits at the times and locations in the table [included within the proposed draft conditions, dated 10 th September 2020]
EPA 2	No change to original	For the purposes of condition 1: a) Day means the period from 7am to 6pm Monday to Saturday and the period from 8am to 6pm Sunday and public holidays. b) Evening means the period from 6pm to 10pm. c) Night means the period from 10pm to 7am Monday to Saturday and the period from 10pm to 8am Sunday and public holidays.
EPA 3	No change to original	Noise enhancing meteorological conditions. a) The noise limits set out in condition 1 apply under the meteorological conditions [as detailed in the proposed draft conditions, dated 10 th September 2020]. b) For those meteorological conditions not referred to in condition L6.3(a), the noise limits that apply are the noise limits in condition 1 plus 5dB.
EAP 4 For the purposes of condition 3: a) The meteorological conditions are to be determined from meteorological data obtained from a meteorological weather station. i) The meteorological weather station may be located on premises or at a suitably positioned offsite location, where the quality of the meteorological data will not be impaired. b) Stability category shall be determined using the following method from Fact Sheet D of the <i>Noise Policy for Industry</i> (NSW EPA, 2017):	Minor word change	1. For the purposes of condition 3: a) The meteorological conditions are to be determined from meteorological data obtained from a meteorological weather station, located on the premises or at a location approved by the EPA. b) Stability category shall be determined using the following method from Fact Sheet D of

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ii) Use of sigma-theta data (section D1.4).		the <i>Noise Policy for Industry</i> (NSW EPA, 2017): i. Use of sigma-theta data (section D1.4).
EPA 5	No change to original	<p>2. To assess compliance:</p> <p>a) with the $L_{Aeq(15 \text{ minutes})}$ or the L_{Amax} noise limits in condition 1 and 3, the noise measurement equipment must be located:</p> <ul style="list-style-type: none"> (i) approximately on the property boundary, where any residence is situated 30 metres or less from the property boundary closest to premises; or where applicable, (ii) in an area within 30 metres of a residence façade, but not closer than 3 metres where any residence on the property is situated more than 30 metres from the property boundary closest to the premises; or, where applicable, (iii) in an area within 50 metres of the boundary of a National Park or Nature Reserve, (iv) at any other location identified in condition 1 <p>b) with the $L_{Aeq(15 \text{ minutes})}$ or the L_{Amax} noise limits in condition 1 and 3, the noise measurement equipment must be located:</p> <ul style="list-style-type: none"> (i) at the reasonably most affected point at a location where there is no residence at the location; or, (ii) at the reasonably most affected point within an area at a location prescribed by condition 5 (a).
EPA 6	No change to original	A non-compliance of conditions 1 and 3 will still occur where noise generated from the premises is measured in excess of the noise limit at a point other than the reasonably most affected point at the locations referred to in condition 5(a) or 5(b).

		Note to condition 5 and 6: the reasonably most affected point is a point at a location or within an area at a location experiencing or expected to experience the highest sounds pressure level from the premises.
EPA 7	No change to original	For the purposes of determining the noise generated from the premises, the modifying factor corrections in Table C1 in Fact Sheet C of the <i>Noise Policy for Industry</i> (NSW EPA, 2017) may be applied, if appropriate, to the noise measurements by the noise monitoring equipment.
EPA 8	No change to original	Noise measurements must not be undertaken where rain or wind speed at microphone level will affect the acquisition of valid measurements.
EPA 9 The meteorological weather station, at a location on the premises, or at a suitably positioned offsite location, must be maintained so as to be capable of continuously monitoring the parameters specified in condition 10.	Minor word change	The meteorological weather station, at a location to be approved, must be maintained so as to be capable of continuously monitoring the parameters specified in condition 10.
EPA 10 For each monitoring point specified in the table [provided in proposed draft conditions, dated 10 th September 2020] the licensee must monitor (by sampling and obtaining results by analysis) the parameters specified in column 1. The licensee must use the sampling method, units of measurement, averaging period and sample at the frequency specified opposite the other columns.	Minor word change	Table Heading Change to: Point for monitoring station
EPA11 Within 6 months of full operations, post commissioning attended noise validation monitoring is to be undertaken during a period of full load in accordance with Condition 1 and must: a) Occur at each receiver location listed in condition 1; b) Occur during day, evening and night periods as defined in the <i>Noise Policy for Industry</i> over two 15-minute compliance measurements during each period. c) Occur for two consecutive days.	Accept change	Within 6 months of full operations, post commissioning attended noise validation monitoring is to be undertaken during a period of full load in accordance with Condition 1 and must: a) Occur at each receiver location listed in condition 1; b) Occur during day, evening and night periods as defined in the <i>Noise Policy for Industry</i> over two 15-minute compliance measurements during each period. c) Occur for two consecutive days.

<p>EPA12 On completion of post commissioning attended noise validation monitoring required in Condition 11, that shows compliance with Condition 1, ongoing attended noise monitoring must be undertaken in accordance with Condition 1 and must:</p> <ul style="list-style-type: none"> a) Occur at one or more receiver locations listed within Table 1, as agreed to by the NSW Environment Protection Authority; b) Occur annually in a reporting period, during a day, evening and night period as defined in the <i>Noise Policy for Industry</i>. 	Accept change	<p>On completion of post commissioning attended noise validation monitoring required in Condition 11, that shows compliance with Condition 1, ongoing attended noise monitoring must be undertaken in accordance with Condition 1 and must:</p> <ul style="list-style-type: none"> a) Occur at one or more receiver locations listed within Table 1, as agreed to by the NSW Environment Protection Authority; b) Occur annually in a reporting period, during a day, evening and night period as defined in the <i>Noise Policy for Industry</i>.
<p>EPA13 A noise compliance assessment report must be submitted to the EPA within 30 days of the completion of the post commissioning validation monitoring and any annual monitoring. The assessment must be prepared by a competent person and include:</p> <ul style="list-style-type: none"> a) An assessment of compliance with noise limits presented in Condition 1 and 3; and b) An outline of any management actions taken within the monitoring period to address exceedances of the limits contained in Condition 1 and 3. 	Accept change	<p>A noise compliance assessment report must be submitted to the EPA within 30 days of the completion of the post commissioning validation monitoring and any annual monitoring. The assessment must be prepared by a competent person and include:</p> <ul style="list-style-type: none"> a) An assessment of compliance with noise limits presented in Condition 1 and 3; and b) An outline of any management actions taken within the monitoring period to address exceedances of the limits contained in Condition 1 and 3.
<p>EPA14</p>	No change to original	<p>All construction work at the premises must be conducted between 7am and 6pm Monday to Friday and between 8am and 1pm Saturdays and at no time on Sundays or public holidays, unless inaudible at any residential premises.</p>
<p>EPA 15</p>	No change to original	<p>The following activities may be carried out outside the recommended construction hours:</p> <ul style="list-style-type: none"> a) Construction that causes $L_{Aeq(15 \text{ minutes})}$ noise levels that are: <ul style="list-style-type: none"> i) No more than 5dB above Rating Background Level at any residence in accordance with the Interim Construction Noise Guideline (DECC, 2009); and ii) No more than the Noise Management Levels specified in Table 3 of the <i>Interim Construction Noise Guideline</i> (DECC, 2009) at other sensitive land uses; or b) For the delivery of materials required by the police or other authorities for safety reasons; or c) Where it is required in an emergency to avoid the loss of lives, property and/or to prevent environmental harm; or d) As approved through the process outlined in [EPA16 of the proposed draft conditions, dated 10th September 2020].

EPA16	No change to original	The hours of construction activities specified under [EPA15(d)] of this approval may be varied with the prior written approval of the Secretary. Any request to alter the hours of construction shall be: a) Considered on a case-by-case or activity-specific basis b) Accompanied by details of the nature and justification for activities to be conducted during the varied construction hours c) Accompanied by written evidence that appropriate consultation with potentially affected sensitive receivers and notification of relevant Council(s) (and other relevant agencies) has been and will be undertaken d) All feasible and reasonable noise mitigation measures have been put in place e) Accompanied by a noise impact assessment consistent with the requirements of the <i>Interim Construction Noise Guideline</i> (DECCW, 2009).
EPA17 The proponent must carry on any activity, or operate any plant, in or on the premises by such reasonably practicable means as may be necessary to prevent or minimise air pollution.	Accept change	The proponent must carry on any activity, or operate any plant, in or on the premises by such reasonably practicable means as may be necessary to prevent or minimise air pollution.
EPA18	No change to original	All plant and equipment installed at the premises or used in connection with the licensed activity: a. must be maintained in a proper and efficient condition; and b. must be operated in a proper and efficient manner.
EPA19	No change to original	The premise must be maintained and operated in a manner that minimises or prevents dust emissions from the premises.
EPA20	No change to original	All operations and activities occurring at the premises must be carried out in a manner that will minimise dust at the boundary of the premises.
EPA21	No change to original	The proponent shall not permit any offensive odour to be emitted beyond the boundary of the site.
EPA22	No change to original	The power station must be designed and constructed so as not to preclude the retrofit of air pollution controls at the premises.
EPA23 Fuel burning equipment must be operated for the purpose of generating electrical power at the premises so that the total NOx emissions do not exceed 338 tonnes for the 12 months following completion of commissioning.	Minor word change	Fuel burning equipment must be operated for the purpose of generating electrical power at the premises so that the total NOx (as NO ₂ equivalent) emissions do not exceed 338 tonnes for the 12 months following completion of commissioning.

NEW EPA 24 No later than 12 months following completion of commissioning, a review of NOx emissions will be completed. The review must consider: <ul style="list-style-type: none"> a) The actual stack emissions of the plant; and b) The predicted annual discharge rate included in condition 23. 	Revise for clarification of information required	Within six weeks following the first 12 months of operation after completion of the commissioning, the proponent must complete a review of NOx emissions and provide a report to DPIE. The report must include: <ul style="list-style-type: none"> a) The complete NOx emission monitoring dataset including emission concentrations, emission rates and relevant discharge parameters, b) unit load data and production data for the period of the review c) A summary of total hours of operation on gas and diesel per unit per month and for the 12 months. d) A summary of the hourly NOx emission rates and concentrations (as NO₂ equivalent) and operating parameters per stack e) Based on a-d, propose a revised annual total NOx (as NO₂ equivalent) emission load limit.
NEW Condition The revised NOx emissions rate must not exceed 338 tonnes per annum.	Minor word change	The total NOx (as NO ₂ equivalent) emissions determined under condition 24 must not exceed 338 tonnes per annum.
NEW Condition The proponent must consult with the EPA on the outcomes of the NOx emissions review.	EPA proposed change to be included during preparation of review	The EPA are to be consulted during the preparation of the review required under condition 24
NEW Condition Amendments to the total annual NOx emissions must be approved by the Secretary.	Accept condition	Amendments to the total annual NOx emissions must be approved by the Secretary.
Original EPA24	Delete	
EPA25	Delete	
EPA26	No change to original	Distillate fuel used in the power station must comply with the Australian Government's <i>Fuel Quality Standards (Automotive Diesel) Determination 2019</i> made under the <i>Fuel Quality Standards Act 2000</i> .
EPA27 The proponent is permitted to exceed the maximum hours specified in Conditions 23 and 24 in the event that operation, or continued operation, is required if: <ul style="list-style-type: none"> a) The Australian Energy Market Operator (AEMO), or a person authorised by AEMO, directs the proponent, under the National Electricity Rules, to take relevant actions to maintain 	Change as condition 23 includes NOx load instead of hours. No change to the word "directs"	The annual NOx load limit in Condition 23 may be exceeded if continued operation of the power station is required, and: <ul style="list-style-type: none"> a) The Australian Energy Market Operator (AEMO), or a person authorised by AEMO, directs the proponent, under the National Electricity Rules, to take relevant actions to maintain or restore the security or reliability of the electricity network; and b) The relevant AEMO direction referred to above remains in force; and

<p>or restore the security or reliability of the electricity network; and</p> <p>b) The relevant AEMO direction referred to above remains in force; and</p> <p>c) The licensee takes all practical measures to prevent or minimise air pollution.</p>		<p>c) The licensee takes all practical measures to prevent or minimise air pollution.</p>
EPA28	No change to original	The proponent must notify the Department and the EPA of any and all limit exceedances due to the activation of condition 27
<p>EPA29</p> <p>Prior to construction, the proponent shall provide a revised Air Quality Impact Assessment (AQIA) to DPIE and EPA that is based on the final design of the plant and includes emission specifications based on manufacturer performance guarantees, or emission factors for pollutants where manufacturer performance guarantees are not provided. In addition to thermal power generation, the final AQIA should also consider gas reception infrastructure and emergency generators. Should the plant design and emission characteristics differ from what was assessed previously (Newcastle Power Station Air Quality Impact Assessment, ERM, 29 April 2020), the AQIA must include remodelling of emissions based on final design.</p>	Accept change	<p>Prior to construction, the proponent shall provide a revised Air Quality Impact Assessment (AQIA) to DPIE and EPA that is based on the final design of the plant and includes emission specifications based on manufacturer performance guarantees, or emission factors for pollutants where manufacturer performance guarantees are not provided. In addition to thermal power generation, the final AQIA should also consider gas reception infrastructure and emergency generators. Should the plant design and emission characteristics differ from what was assessed previously (Newcastle Power Station Air Quality Impact Assessment, ERM, 29 April 2020), the AQIA must include remodelling of emissions based on final design.</p>
EPA30	TA-Air are not opposed to deleting – it is essentially the same as EPA 22	
<p>EPA31</p> <p>Within six months of commissioning the plant (or an alternative timeframe agreed to the department in consultation with the EPA) and during a period in which the project is operating under high design loads, the proponent must undertake a monitoring program to confirm the air emission performance of the power station.</p> <p>The monitoring program must include, as a minimum:</p> <p>a) Two rounds of post-commissioning monitoring of the pollutants and parameters in the table below for each discharge point.</p> <p>b) Consideration of the dual-fuel and peaking operability of the power station in capturing representative air pollutant emission concentrations and normal operating parameters.</p>	<p>Accept increase time period to six months</p> <p>Must include PAHs and SO₂</p>	<p>Within six months of commissioning the plant and during a period in which the project is operating under high design loads, the proponent must undertake a monitoring program to confirm the air emission performance of the power station.</p> <p>The monitoring program must include, as a minimum:</p> <p>a) Two rounds of post-commissioning monitoring of the pollutants and parameters in the table below for each discharge point.</p> <p>b) Consideration of the dual-fuel and peaking operability of the power station in capturing representative air pollutant emission concentrations and normal operating parameters.</p> <p>c) Sampling methods as per the NSW EPA's <i>Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales</i></p>

c) Sampling methods as per the NSW EPA's <i>Approved Methods</i>		
<p>EPA32</p> <p>Within six weeks of completing post-commissioning testing, the applicant must submit a Post Commissioning Verification Report (the Report) to the EPA. The Report must:</p> <p>a) Include all analytical results of post-commissioning monitoring required for all discharge points. Any external report must be reproduced in full.</p> <p>b) Include all the information listed in section 4 of the <i>Approved Method for the Sampling and Analysis of Air Pollutants in New South Wales</i>.</p> <p>c) Describe all the operational parameters during post-commissioning testing.</p> <p>d) Compare analytical results from post commissioning monitoring against final design emission specifications and modelled emission parameters in the AQIA required under condition 29 (final design verification assessment).</p> <p>e) Should any comparison under (d) identify monitored discharge concentrations or emission rates above the emissions characteristics in the revised AQIA or the <i>Protection of the Environment Operations (Clean Air) Regulation 2010</i> standards of concentration, actions and measures to be implemented to reduce emissions of air pollutants to no greater than those predicted in the AQIA must be identified. Details of the actions and measures and a timetable for implementation shall be submitted to the Department and the EPA for approval.</p>	Rewording of e) for readability and including the option for reassessment of impacts	<p>Within six weeks of completing post-commissioning testing, the applicant must submit a Post Commissioning Verification Report (the Report) to the EPA. The Report must:</p> <p>a) Include all analytical results of post-commissioning monitoring required for all discharge points. Any external report must be reproduced in full.</p> <p>b) Include all the information listed in section 4 of the <i>Approved Method for the Sampling and Analysis of Air Pollutants in New South Wales</i>.</p> <p>c) Describe all the operational parameters during post-commissioning testing.</p> <p>d) Compare analytical results from post commissioning monitoring against final design emission specifications and modelled emission parameters in the AQIA required under condition 29 (final design verification assessment).</p> <p>e) Should any comparison under (d) identify monitored discharge concentrations or emission rates above the emissions characteristics in the revised AQIA or the <i>Protection of the Environment Operations (Clean Air) Regulation 2010</i> standards of concentration, the proponent must:</p> <ol style="list-style-type: none"> re-assess and evaluate both the emission concentrations against the relevant POEO Clean Air Regulation standards of concentrations and the impacts against the relevant impact assessment criteria in the <i>Approved Methods for the Modelling and Assessment of Air Pollutants in NSW</i>; and/or identify actions and measures to be implemented to reduce emissions of air pollutants to no greater than those predicted in the AQIA. Details of the actions and measures and a timetable for implementation shall be submitted to the Department and the EPA for approval.
EPA33	No change to original	The following points referred to in the table [provided in draft proposed condition 33, 10 th September 2020] are identified for the purposes of monitoring and/or setting of limits for the emission of pollutants to the air from the point.
EPA34	No change to original	For each monitoring/discharge point specified by the tables below, the concentration of a pollutant discharged at that point, must not

		exceed the concentration limits specified for that pollutant in the table [provided in draft proposed condition 33, 10 th September 2020].
EPA35 The proponent shall, for each air monitoring/discharge point, determine the pollutant concentrations and emission parameters specified in Table M. Monitoring must be undertaken during maximum load. For each pollutant, the proponent must use the sampling method, units of measure, and sample at the frequency, specified opposite in the other columns. Sampling methods as per the NSW EPA's <i>Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales</i> .	Delete the words "Monitoring must be undertaken during maximum load."	The proponent shall, for each air monitoring/discharge point, determine the pollutant concentrations and emission parameters specified in Table M. For each pollutant, the proponent must use the sampling method, units of measure, and sample at the frequency, specified opposite in the other columns. Sampling methods as per the NSW EPA's <i>Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales</i> .