

Department of Planning, Housing and Infrastructure

Our ref: Julius Avenue Data Centre (SSD-80018208)

Mr Matthew Cox
Project Director
ISPT PTY LTD
Level 5, 24 York Street
Sydney NSW 2000

26 September 2025

Subject: Julius Avenue Data Centre – Additional matters for Submissions Report

Dear Mr Cox

I refer to the Department of Planning, Housing and Infrastructure's (the Department) previous correspondence dated 28 August 2025, which requested the provision of a Submissions Report in response to issues raised in public submissions and agency advice relating to your current State significant development application for the proposed Julius Avenue Data Centre in North Ryde (SSD-80018208).

In addition to responding to the submissions and advice already received, you are required to submit additional information that addresses the matters listed in **Attachment 1** of this letter, as well as the request for information issued on 14 August 2025. Key concerns include biodiversity impacts and the proposal's alignment with the Macquarie Park Design Guide.

Given the complexity of the identified issues, the Department is open to arranging a meeting to discuss the matters outlined in **Attachment 1**.

If you have any questions, please contact Jeffrey Peng on (02) 9995 6685 or via email at jeffrey.peng@planning.nsw.gov.au.

Yours sincerely

A handwritten signature in black ink, appearing to read "Joanna Bakopanos".

Joanna Bakopanos
A/Director
Industry Assessments

ATTACHMENT 1

Based on the Department's review of the information provided in the environmental impact statement (EIS), the Department considers further information is required to clarify matters and address inconsistencies within the documentation. In this regard, the following information is required to be provided as part of your Submissions Report:

Development Footprint

1. The Department echoes the concerns raised by City of Ryde and the CPHR Group regarding the development's footprint. The Department notes that key elements of the proposal, including the new internal road connection with Richardson Place, the sub-transmission switching station (STSS), and the enclosed generator gantry at the rear of the data centre building, encroach into the prescribed landscape setback area identified in Figure 37b of the Macquarie Park Design Guide.

Given the significance of these concerns, the footprint of the development should be amended to avoid impacts and retain existing biodiversity values in this prescribed landscape setback area.

Consistency with the Macquarie Park Design Guide

3. The proposed data centre development does not satisfy Clause 7.3 of the Ryde Local Environmental Plan 2014, as it is inconsistent with the Macquarie Park Design Guide. Any departures from the Guide's provisions must be justified through an alternative design that demonstrably achieves the relevant objectives, particularly those relating to biodiversity protection, landscape setbacks, and canopy retention.

Biodiversity

4. A detailed options analysis as per Section 7.2 of the Biodiversity Assessment Method is required to demonstrate all feasible and reasonable alternatives have been investigated to avoid impacts. In determining the preferred option, justifications must also identify any other site constraints (e.g. landscape setback, bushfire risk, flood hazard) that have been considered in determining the development's footprint and layout design.

Infrastructure Requirements

5. To address the SEARs, the Submissions Report must provide details of electricity infrastructure required to service the proposed data centre in its ultimate capacity, including on-site and off-site upgrades, connection points, and any augmentation of the existing network. Additionally, the response must include an infrastructure delivery and staging plan detailing how these works will be co-ordinated with Ausgrid, funded, and delivered to ensure timely implementation prior to the commencement operation.
6. To enable a comprehensive assessment of water supply, efficiency, and resilience for the proposed development, please address the following

- Provide a clear breakdown of the development's water demand from inception to ultimate capacity, including annual design, peak, and average potable water use, and specify the water demand for the cooling system and other major end uses.
- Identify all water sources proposed for the development, such as potable water, recycled water, rainwater, or other rainfall-independent sources, and indicate their expected contribution to meeting demand.
- Confirm whether a feasibility assessment has been undertaken with the relevant Water Utility or an alternative provider, and provide details of any discussions, agreements, or commitments regarding water supply and wastewater servicing.
- State the projected Water Usage Effectiveness (WUE) for the development and compare this value to recognised good practice or best practice benchmarks.
- Describe the measures proposed to ensure water supply resilience and operational continuity during water restrictions or drought conditions, including any on-site storage or contingency arrangements.

Operational Noise

7. The collection, processing, and reporting of background noise monitoring data in the Noise and Vibration Impact Assessment does not appear to satisfy the requirements outlined in Fact Sheets A and B of the Noise Policy for Industry (NPfI). Specifically, the Department has identified the following issues:
 - There is no statement justifying the selection of each monitoring location, including the procedure used to choose each location, with reference to the definition of the “reasonably most-affected location(s)”
 - The L2 data logger was positioned close to trees, and no attempt was made to exclude wind-induced foliage noise, contrary to Fact Sheets A4 and B1.1 of the NPfI
 - Seasonal variations in background noise levels due to insect activity in the summer months have not been considered (see Fact Sheet A)
 - There is insufficient long-term monitoring data at the potentially most-affected residences to accurately characterise the existing noise environment. As per Table A1 and Fact Sheet A5, at least one week of valid data covering operational days and times is required
 - 15-minute samples affected by extraneous noise were not fully excluded as per Fact Sheet B1.3, noting that where the number of excluded 15-minute samples exceeds 8, 2 or 4 for day, evening or night, respectively, background noise needs to be re-monitored
 - There is no evidence that the rating background noise levels derived from L1 and L2 during December 2024 are representative of the noise environment at the most-affected residences during times when maximum impacts would likely occur.

Note: In determining the reasonably most-affected residence(s) under the Noise Policy for Industry, factors such as existing background levels, noise source locations, distance to receivers,

and shielding must be considered. The noise contour maps indicate that certain residential receivers (e.g. RES9–RES10, which are farther set back from Epping Road than RES8, and multi-storey residences farther from Mowbray Road than RES5 and RES6) may experience lower background noise levels than those captured at the monitoring locations. The assessment must justify the selection of sensitive receivers, identify those reasonably most-affected, explain the basis for selecting monitoring/assessment locations, and clarify whether additional background noise monitoring is required.

8. To support a clearer understanding of predicted noise impacts, please provide the following updates to the Noise and Vibration Impact Assessment:
- A three-dimensional version of Figure 3 (“Noise modelling inputs and noise source locations”), similar to the façade noise maps shown in Figures 6 and 7, to better illustrate vertical source locations and building geometry.
 - Consistent receiver labelling across all figures and maps. The numbering of commercial receivers differs between Figure 2 and the noise contour maps in Appendix G. Please label all receivers on the contour maps and adjust typology as needed to maintain legibility.
 - Given the complex topography surrounding the site and the fact that the highest operational noise levels originate from elevated parts of the data centre, please provide vertical noise grids for residential receivers in Noise Catchment Areas 2 and 3. This is particularly important as the contour maps are based on impacts measured two metres above ground level, whereas Table 3 of the NVIA confirms that all residential receivers are two storeys or greater.
 - An inventory of all potential noise sources (e.g. cooling equipment, transformers, shunt reactors, circuit breakers, cooling fans, corona discharge, capacitor banks, and disconnectors)
 - Noise mitigation measures applied to each source (e.g. acoustic enclosures, low-noise equipment), along with expected reductions.
 - Evaluation of cumulative operational noise associated with the data centre and substation (if proposed on the site) for any potential annoying noise characteristics such as tonality and dominant low-frequency content

Construction Noise

9. The relevant noise management level of LAeq,15min 70 dB(A) at 3 Richardson Place is predicted to be exceeded by up to 11 dB during site establishment, demolition, excavation, road works and building construction. Despite this, the Noise and Vibration Impact Assessment provides only generic mitigation measures, without assessing their effectiveness at the most-affected commercial receiver.

To address this information gap, receiver-specific noise management strategies are needed, including an evaluation of scenarios where temporary noise barriers may be effective at reducing noise received at a multi-storey building, and details of consultation with the tenant at 3 Richardson Place to determine the feasibility of scheduling activities to minimise construction noise impacts.

As per the Interim Construction Noise Guideline, the level of assessment should reflect the duration and severity of impacts. The updated noise report must demonstrate how feasible and reasonable measures will minimise noise impacts at 3 Richardson Place over the 238-week construction period, with specific regard to the duration and severity of predicted exceedances.

Air Quality, Climate and Local Environmental Impacts

10. It is noted that the EIS documentation does not include an assessment of potential air pollution or urban heat island effects on nearby sensitive public recreation areas, such as the Great North Walk. These areas may be particularly vulnerable to changes in local air quality and microclimate conditions, especially during prolonged generator testing or other heat- and emission-generating activities. In addition, the proposal involves the clearing of significant vegetation, which may further exacerbate both air quality impacts and localised urban heat effects by reducing natural shading, evapotranspiration, and pollutant filtration.

Please provide an assessment of potential air quality and urban heat impacts on these types of receivers, including:

- Identification of relevant public recreation areas within the potential impact zone
- Consideration of cumulative heat and emissions from proposed activities (e.g. generator operation from 7 am to 6 pm), in the context of vegetation removal
- Any mitigation measures proposed to minimise impacts on users of these areas.

This information is required to ensure that potential impacts on public health, amenity, and the local environment have been adequately assessed.

11. In accordance with NSW Guide for Large Emitters, the proposed development must prioritise avoidance of emissions, including those associated with vegetation clearing. The Submissions Report must provide evidence of efforts to avoid clearing, such as consideration of alternative site layouts or designs (e.g. a taller built form with smaller development footprint), or a justification for why avoidance is not feasible

Legal Restrictions on Title

12. Please provide a plan that overlays the easements and rights of carriageway that burden the site onto the Site Plan from the architectural drawing set.

Traffic and Access

13. The Transport Impact Assessment Report must be updated to provide a road safety assessment and pavement assessment in accordance with the TfNSW Guide to Transport Impact Assessment. These assessments are necessary to identify any geometric improvements or pavement upgrades required to accommodate servicing vehicles associated with the development. Additional information must also be provided to justify why Medium Rigid Vehicles are considered the largest vehicles to be utilised in association with the operation of the data centre.
14. Construction traffic and ongoing service vehicle movements may not only affect local businesses and congestion, but also reduce the amenity and safety of pedestrians and bush track users,

particularly where heavy vehicle access interfaces with public walking routes. The Applicant must assess these impacts in detail, including potential conflicts at pedestrian crossings, shared paths, and bush track entry points. Mitigation measures, such as traffic calming, signage, restricted access times, and alternative routing, should be considered to minimise disruption and ensure pedestrian safety. This assessment should also address cumulative impacts during peak construction periods and provide justification for the proposed vehicle access arrangements in sensitive interface areas.

Clarification of Technical and Operational Details

15. The EIS cites a STSS with a capacity of 180 MVA, whereas the planning advice letter from Ausgrid, located in Appendix 29 of the EIS, indicates an ultimate demand of 240 MVA. Further information is required to clarify the staging of the proposed development and its ultimate power consumption.
16. Further information is required to clarify the anticipated total duration of backup generator usage and testing per year, excluding power outage events. The Department notes discrepancies across the EIS, with quoted totals of 194.4 hours (Noise and Vibration Impact Assessment), 197.1 hours (Air Quality Impact Assessment), and 256 hours (Greenhouse Gas Assessment). Please confirm the correct figure and explain the basis for the variation with reference to any manufacturer requirements for efficient operation and avoidance of improper operation.
17. The Air Quality Impact Assessment notes there could be up to 37 tests conducted each month. Further information is required to clarify the maximum duration of testing on any given day, noting that the proposed operating hours suggest testing could occur for up to 11 hours continuously from 7am to 6pm. This clarification is necessary to assess potential short-term impacts and cumulative exposure risks, including those related to noise and urban heat.
18. The Noise and Vibration Impact Assessment has adopted the MTU 20V 4000 G94LF generator for assessment, whereas the Air Quality Impact Assessment has adopted the CAT C175-20 diesel generator. Unless otherwise justified, please clarify which generator model is proposed and ensure consistency across technical assessments.
19. There is an inconsistency between the Power Use Effectiveness (PUE) quoted in the EIS (1.35 on page 133) and the ESD Report (1.27). Please confirm the correct figure.
20. The Erosion and Sediment Control Plan (241920-TTW-00-DR-CI-02101-B) shows an indicative location for an earth basin that appears to overlap with the footprint of the STSS. Please clarify how this basin will function during construction.