Address all communication to the Chief Executive Officer
Shellharbour City Council,
*Dharawal Country*
Locked Bag 155, Shellharbour City Centre, NSW 2529
DX 26402 Shellharbour City Centre
**p.** 02 4221 6111 **f.** 02 4221 6016
council@shellharbour.nsw.gov.au
**www.shellharbour.nsw.gov.au**

13 November 2023

Department of Planning
Contact: Mandana Mazaheri
Via: NSW Planning Portal Tallawarra A Power Station Upgrade | Planning Portal - Department of Planning and Environment (nsw.gov.au)

**SSD-60938959 - Tallawarra A Power Station Upgrade**

Dear Sir/Madam

I refer to the above State Significant Development Application (SSDA) currently being assessed by your department and thank you for the opportunity to comment. Council officers have undertaken a review of the SSDA and supporting information. This letter provides feedback on the SSDA for your consideration.

*Of note, as the submission deadline concludes on 14 December 2023, this submission has not been reported to the elected Council for formal consideration and endorsement. A further submission may be provided from the elected Council.*

Shellharbour City Council supports the proposals intent to:

- increase the efficiency in the power station.
- minimise natural gas consumption.
- improve the reliability of the Tallawarra A power station.
- increase the maximum energy generation capacity of the Tallawarra A power station to provide network stability during the transition to renewable energy supply in NSW.

However, Shellharbour City Council is concerned about the potential impacts from plume rise on aviation safety for users of Shellharbour Airport. Council requests that the Department of Planning and Environment carefully consider the information provided by the applicant on the plume impacts for aviation safety. Additionally, Council requests that the Department of Planning and Environment on this occasion require the applicant to monitor plume rise and cumulative plume rise and implement a real time safety management system that provides advice to Shellharbour Airport on the real-time plume performance, without any modelled or theoretical data. It is vitally important to Shellharbour Airport that modelled and hypothetical plume rise velocities are validated in real time and that the measured plume velocities are shared openly by the applicant. This is the only way air safety can be managed effectively.

In this regard Council provides the following observations and comments:

1. Council previously requested that information that should be submitted as part of the application to ensure that the proposed upgrade would have no impact on aviation safety, refer to Attachment 1 below. It is noted that the aviation risk of the proposal was assessed in the Tallawarra A upgrade – Aviation Risk Assessment included in

Appendix C of the EIS and summarised in Section 6.5.4. The assessment concluded that no mitigation measures or monitoring would be required for aviation risk. However, Council remains of the opinion that the impacts of the proposal should be modelled in detail and monitored due to the high aviation use in the area and potential consequences if modelled results do not match real world results.

2. The Department of Planning must ensure that any plume rise assessment is conducted in accordance with CASA Advisory Circular AC 139.E-02 v 1.0.

3. Conditions of consent must ensure that ongoing exhaust plume monitoring is undertaken in real time. This can be relatively easily achieved using systems such as LiDAR. The monitoring should be of the actual real-world plume velocities and not utilise any theoretical inputs or modelled outputs.

4. Conditions of consent should require the applicant to publish real time plume monitoring results on their website.

5. The applicant should establish pre and post hydrogen plume characteristics at predetermined AGL levels (using actual plume data not theoretical modelling).

6. It must be confirmed that the assessment of the exhaust plume is also considering the cumulative effects for the use of both Tallawarra A and B, including the proposal for Tallawarra B using 5% hydrogen mix and any potential combined affects with the subject proposal for Tallawarra A.

7. The Department of Planning must ensure that an appropriate aviation risk assessment is conducted using data gathered. The risk assessment should be shared with council and local users of Shellharbour Airport to address aviation safety concerns.

Council would welcome the opportunity to comment on potential conditions of consent which may address the commentary above.

Should you have any enquiries in relation to this matter, please do not hesitate to contact the undersigned on (02) 4221 6111.

Yours sincerely

**Wayde Peterson**
**Executive Director Business Enterprises**

## Attachment 1 – Council's Previous Correspondence on Proposal

Shellharbour CITY COUNCIL

Winner Most progressive metropolitan and regional council in NSW A.R. BLUETT MEMORIAL AWARD 2019

**Address all communication to the Chief Executive Officer**
Shellharbour City Council,
*Dharawal Country*
Locked Bag 155, Shellharbour City Centre, NSW 2529
DX 26402 Shellharbour City Centre
**p.** 02 4221 6111 **f.** 02 4221 6016
council@shellharbour.nsw.gov.au
**www.shellharbour.nsw.gov.au**

17 August 2023

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

Also uploaded onto NSW Planning Portal

**Tallawarra A Power Station – SSD-60938959**
**Lot 1092 DP11403369 – Yallah Bay Road, Yallah**

Dear Sir/Madam

Thank you for the opportunity to the provide advice in relation to the above upgrade works at Tallawarra A Power Station. Council has reviewed the SSD scoping report for the proposed upgrade works (reference P522990 revision A.06, prepared by Aurecon dated 04.08.2023) and provide the following comments:

1. Aviation Safety

To ensure the proposed upgrade will have no impact on aviation safety, a plume velocity and temperature baseline should be established prior to any work being conducted on Tallawarra A. It is recommended that LiDAR technology (or a similar method) be utilised to measure the actual plume exiting the powerplant. The results should be compared to post upgrade actual plume velocity data to ensure there will be no increased threat to aviation safety.

Additionally, actual plume velocity data should be used to confirm there is no cumulative effect with the upgrade of Tallawarra A and the commissioning of Tallawarra B on aviation safety.

Should you have any enquiries in relation to this matter please do not hesitate to contact the undersigned on (02) 4221 6111.

Yours sincerely
**Stacey Houlison**
**Principal Planner – Development Assessment**