

Council Reference: 12151110

13 October 2023

Department of Planning

Contact: Mandana Mazaheri

Via: NSW Planning Portal [MOD 3 - Green Hydrogen Fuel Mix | Planning Portal - Department of Planning and Environment \(nsw.gov.au\)](#)

Tallawarra Power Station - Green Hydrogen Fuel Mix - MP07_0124-Mod-3

Dear Sir/Madam

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

Of note, as the submission deadline concludes on 18 October 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 proposals with tangible environmental benefits such as the subject proposal which will see a reduction in greenhouse gas emissions with 5% green hydrogen in the fuel mix. However, the potential impacts from plume rise and aviation safety impacts for Shellharbour Airport must be carefully considered and monitored. In this regard Council provides the following observations and comments:

1. The Department of Planning must ensure that the plume rise assessment is conducted in accordance with CASA Advisory Circular AC 139.E-02 v 1.0
2. Conditions of consent must ensure that exhaust plume monitoring is undertaken in real time. This can be 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.
3. Conditions of consent should require the applicant to publish real time plume monitoring results on their website.
4. The applicant should establish pre and post hydrogen plume characteristics at predetermined AGL levels (using actual plume data not theoretical modelling).

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