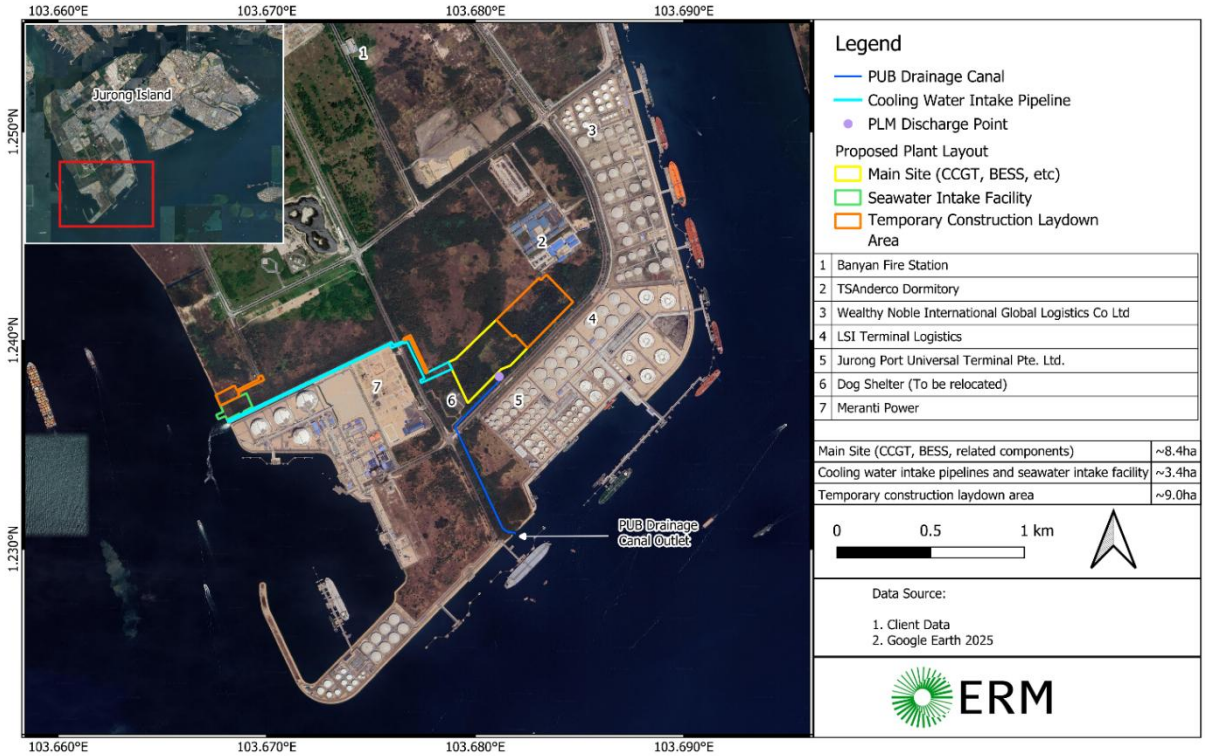
Summary of Response to Feedback on the Environmental Impact Assessment (EIA) for a 670 MW CCGT on Jurong Island

Overview of Project and Project Site

The Energy Market Authority ("EMA") has awarded PLM Power Pte Ltd ("PLM") the Project to build, own, and operate a single 670MW Combined Cycle Gas Turbine (CCGT) power generating unit with hydrogen capability, and associated seawater (cooling water) intake infrastructure with an 80 MW Battery Energy Storage System (BESS), located on reclaimed land at a greenfield site, located at Meranti Road, Jurong Island per Figure 1. The Project is surrounded by industries, vacant land and a dormitory. The operational Project site will occupy a total of 11.8ha with additional temporary construction laydown areas of 9.0ha. The Project site consists of:

- The main site, which will include the CCGT, BESS and related components (in an area of approximately 8.4ha);
- Cooling water intake and discharge infrastructure (approximately 3.4ha); and
- Temporary construction laydown areas (approximately 9.0ha).

FIGURE 1: PROJECT SITE AND SURROUNDINGS



Environmental Study

PLM commissioned Environmental Resources Management (S) Pte Ltd ("ERM") to conduct the EIA for this Project. The purpose of the EIA is to assess the potential

impacts of the construction and operation of the Project on the marine environment[1]. The full EIA can be found here.

Engagement with Stakeholders

PLM engaged with various Singapore Government Technical Agencies as well Nature Group representatives during the EIA process. The engagement provided a forum for stakeholders to provide their perspectives and potential concerns, enabling their feedback to be considered in the EIA.

Public Disclosure of the EIA Report

The full EIA was disclosed and open for public feedback from 16 February 2026 to 15 March 2026. A total of 2 individual submissions were received.

Response to Feedback Received

We value all the feedback received and recognise the importance of minimising potential adverse impacts resulting from the Project to environmental receptors. The feedback covered 6 main topics, with summarised responses provided for each, as listed below:

1. Impact Assessment Methodology

Respondents sought clarity on the Impact Assessment methodology adopted.

The EIA study follows ERM's IA Standards, which have been adopted both internationally (over 50 years) and in Singapore (over 20 years). This standard has been accepted across ERM's International and Singapore EIAs to date and forms the basis for the impact assessment within this study.

2. Cumulative Impacts

Respondents sought clarity on why a cumulative impact assessment was not conducted.

Data relating to current and future developments are confidential and not publicly available. Therefore, a cumulative impact assessment has not been included in this EIA. As highlighted in the EIA, this Project should be evaluated under the cumulative impact assessments conducted by any future project EIAs, given data from this EIA will be publicly available. This approach is in alignment with the Technical Agencies.

3. Water Quality and Modelling Approach

Respondents sought clarity on the water quality and modelling methodology.

The modelling followed established national and international practices, used validated datasets under different scenarios, and was aligned with the Technical

[1] A separate regulatory Pollution Control Study (PCS) will be conducted to assess the potential environmental impacts of air pollution, noise pollution, surface water discharge, soil and groundwater contamination, waste management and hazardous chemical management during project operation.

Agencies. The results show that temperature and chlorine changes are small, localised and within acceptable environmental thresholds.

4. Marine Biodiversity and Macrobenthos

Respondents sought clarity on the marine ecological receptor data sources, macrobenthos baseline and assessment of coral reef habitats.
The use of the existing datasets to establish baseline conditions was aligned with the Technical Agencies. It is considered that existing data was sufficient to identify the Helios Secondary Reef as a key sensitive receptor (700m away from the outlet of the drainage canal). Thus, the presence of coral in the area was given due consideration in the assessment. Any additional information and/or surveys is considered to not result in a change to the modelling outcomes and impact assessment. Modelling shows that measurable changes in elevated temperature and chlorine are confined within 300 metres of the PUB drainage canal outlet under worst case scenarios for less than 1% of the time during the Northeast Monsoon. In all other modelled scenarios, the zone of influence is within 100 metres of the outlet as temperature and chlorine levels are dispersed within the area. Hence the Project will not cause any significant stress to corals within the vicinity of the outfall. A minor clarification has also been made in the EIA regarding how baseline macrobenthos conditions are described, without any change to the assessment conclusions.

5. Other Marine Users (Navigation, Intakes, Terminals)

Respondents sought clarity on the scope of the EIA related to other marine users.
This EIA primarily focused on the environmental impacts associated with the construction and operations of the Project on the marine environment. Impacts to other marine users were outside the specific scope of this EIA in alignment with the Technical Agencies. PLM will ensure that the required stakeholders are consulted and ensure that all necessary permits and approvals are obtained prior to the construction and operation of the plant. Applications and associated studies will be submitted to the relevant Technical Agencies where appropriate for their review and approval.

6. Environmental Monitoring and Reporting

Respondents sought clarity on the plans for environmental monitoring.
Comprehensive Environmental Management and Monitoring Plans will be implemented for both the construction and operation phases of the Project, including defined thresholds and reporting mechanisms which are aligned with the Technical Agencies. This ensures ongoing oversight and timely action if required. Furthermore, the Government carries out periodic coastal habitat monitoring in Singapore to guide assessment of development proposals, identification of key areas for conservation, as well as carrying out monitoring of high biodiversity sites with volunteers and partners.

<u>Conclusion</u>

This Combined Cycle Gas Turbine plant with Battery Energy Storage System and hydrogen capability is able to achieve over 64% combined cycle efficiency, which meets Tier 1 emission standards for CCGTs (approximately 10% more carbon efficient than existing generation units in Singapore). Its potential to harness hydrogen as an energy source is important in achieving Singapore's net zero emissions target by 2050.

Given that the feedback received has already been appropriately addressed in the published EIA report, only 1 change has been made to the EIA regarding the baseline macrobenthos descriptions (item 4 above).

The Project is required to continue monitoring works throughout all stages of the development, to ensure that any additional concerns that may arise are addressed adequately in collaboration with the Technical Agencies.