



Western Sydney Green Gas Project Modification 2

Operating Hours

State Significant Development Modification Assessment (SSD 10313 MOD 2)

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1 Introduction

Jemena Gas Networks (NSW) Limited (Jemena) owns the Western Sydney Green Gas Project (the project), located at the existing Jemena high pressure gas facility in Horsley Park (Horsley Park Facility), in the Fairfield local government area and Greater Sydney Parklands.

The Horsley Park Facility is located approximately 32 kilometres (km) west of the Sydney central business district and includes several facilities associated with Jemena's Eastern Gas Pipeline, Jemena Gas Networks Trunk Main, Sydney Primary Loop and secondary natural gas distribution network.

The predominant land use around the project site includes active open space area, rural land to the east and industrial land to the north. There are 10 residential properties within 500 metres (m) of the project, with 3 closest properties located approximately 90 m to 160 m south of the site boundary.

The project was approved under delegation from the Minister for Planning and Public Spaces on 10 August 2020 and allows Jemena to construct and operate a 500 Kilowatts (kW) power to gas (P2G) Facility to produce up to 87,600 kg of hydrogen gas per year using electrolysis and store hydrogen gas in a buffer storage pipeline on site. The consent allows the produced hydrogen to be injected into Jemena's secondary gas pipeline/distribution network up to 2% hydrogen by volume. The consent has been modified on one occasion for the incorporation of a hydrogen fuel cell and on-site hydrogen cylinder filling station for hydrogen delivery and generation of power on-site (Modification 1).

Construction works under this development consent commenced in January 2021, and a staged commissioning process commenced in May 2021. The project is to be operated autonomously with no permanent on-site operator required. Subject to planning approval, Jemena anticipates commencing operation in late 2022, following which the consent permits the project to operate for 5 years.

The project has a capital investment value of \$18 million, generating 30 full-time jobs during construction, and 2 full-time jobs during operation.

2 Proposed modification

The development consent limits the operation of the project's fuel cell and compressor to 7 am to 10 pm on any day of the week and cylinder refilling to 7 am to 6 pm Monday to Friday, 8 am to 1 pm Saturday at no time on Sundays and NSW public holidays. This proposal seeks to allow operation of the fuel cell, compressor and cylinder filling to occur 24 hours a day 7 days per week.

3 Statutory context

3.1 Scope of modifications

A modification application involving minimal environmental impacts was lodged to the Department of Planning and Environment (the Department) under Section 4.55(1A) of the EP&A Act on 13 July 2022.

The Department has reviewed the proposal and considers that the application meets this requirement, as it is substantially the same development as originally approved in 2020 without any change to the approved project's disturbance area, schedule of the land or impacts of the approved project.

3.2 Consent authority

The Minister for Planning (the Minister) is the consent authority for the modification application. However, under the Minister's delegation dated 9 March 2022, the Director, Resource Assessments, may determine the application.

3.3 Mandatory Matters for Consideration

The Department has considered relevant required matters in accordance with section 4.15(1) of the EP&A Act including the objects of the EP&A Act, applicable environmental planning instruments, the likely impacts of the modification application, site suitability and the public interest. The Department has also considered the reasons for the granting of the original application in its assessment of the project and is satisfied that the proposed modification does not affect the decision that was previously made.

4 Engagement

In accordance with clause 105 of the *Environmental Planning and Assessment Regulation 2021*, the notification requirements of the EP&A Regulation do not apply to section 4.55(1) modifications with minimal environmental impacts. Nevertheless, the Department made the modification application publicly available on its website from 17 August 2022 and consulted with its hazards experts.

5 Assessment

The operation of the compressor and cylinder filling on a 24-hour a day, 7 days a week basis would not significantly increase environmental impacts of the project, including hazards and operational noise at the sensitive receive locations. The noise limits set in the consent would continue to be met with the proposed change in operating hours for these activities.

The Department notes that the operational noise assessment completed for Modification 1 (refer to **Appendix A2**) identified that the operation of the fuel cell during the night-time period would result in an exceedance of the noise trigger levels at the closest residential receiver. The Department has therefore recommended that the existing limits on the operation of the fuel cell (7 am to 10 pm on any day of the week) are not changed for the proposed modification.

The Department has consulted with its hazards experts and they were satisfied that the proposed operation of the cylinder filling on a 24/7 basis would be consistent with the hazard analysis for the site (revised Final Hazards Analysis dated 2 July 2022 submitted with the Modification 1 application), noting that cylinders are removed from site after filling, and the consent does not allow on-site high-pressure hydrogen storage facility and on-site storage of full hydrogen cylinders. Jemena has also clarified that operation of the compressor and cylinder refilling are not mutually exclusive, and that the compressor must be operating at all times during the cylinder filling process as the Modification 1 removed the use of a high pressure hydrogen storage for refuelling purposes.

This proposal would not involve any physical changes to the approved components of the project or change any of the approved activities and only seeks to align the project's operating hours in the consent with the previously assessed and approved documents.

The Department considers that the proposal would ensure consistency within the development consent and previous assessment documentation and that there would be no increase in environmental, social or economic impacts beyond those already assessed and approved.

Consequently, the Department considers that the proposed modification should be approved with the exception of the proposed changes to the operating hours of the fuel cell, subject to conditions and revisions to any relevant management plans or studies required under the consent to reconcile the revised operating hours, where relevant.

6 Determination

The Department has drafted an Instrument of Modification (see **Appendix B**) for the proposed modification, as well as a consolidated version of the consent as modified (see **Appendix C**).

It is recommended that the Director, Resource Assessments, as delegate of the Minister for Planning:

- **considers** the findings and recommendations of this report;
- **determines** that the Western Sydney Green Gas Project Modification 2 (SSD 10313 MOD 2) falls within the scope of Section 4.55(1A) of the EP&A Act;
- **accepts and adopts** all of the findings and recommendations in this report as the reasons for making the decision to approve the modification;
- **modifies** the consent (SSD-10313); and
- **signs** the attached Instrument of the modification (**Appendix B**).

Recommended by:



26 August 2022

Jack Turner

A/ Team Leader

Resource Assessments

The recommendation is **Adopted / Not adopted** by:



29 August 2022

Steve O'Donoghue

Director

Resource Assessments

as delegate of the Minister for Planning

Appendices

Appendix A – List of the Key Documents

A1: Modification 2 Report - Refer to folder 'Modification Application' on the Department's website at

<https://www.planningportal.nsw.gov.au/major-projects/projects/mod-2-operating-hours>

A2: Modification 1 Report: Refer to folder 'Modification Application' on the Department's website at

<https://www.planningportal.nsw.gov.au/major-projects/projects/mod-1-fuel-cell-and-cylinder-filling>

Appendix B – Instrument of Modification

Refer to folder 'Determination' on the Department's website at

<https://www.planningportal.nsw.gov.au/major-projects/projects/mod-2-operating-hours>

Appendix C – Consolidated Development Consent

Refer to folder 'Consolidated Consent' on the Department's website at

<https://www.planningportal.nsw.gov.au/major-projects/projects/mod-2-operating-hours>