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APA Group | apa.com.au

18 October 2022

APA Reference: 448721, 500017
Your Reference: SSD-13137914

Julia Green
NSW Department of Planning & Environment
Locked Bag 5022
Parramatta NSW 2124

Dear Julia,

RE: Proposed Marulan Solar Farm and associated infrastructure
State Significant Development Application Number SSD13137914

Thank you for the opportunity to review/comment on the Scoping Report for the Marulan Solar Farm project (The project) that has been prepared to inform the development of an Environmental Impact Statement. Please find outlined below APA's preliminary planning advice for the proposed development.

APA Group (**APA**) is Australia's largest natural gas infrastructure business and has direct management and operational control over its assets and investments. APA's gas transmission pipelines span across Australia, delivering approximately half of the nation's gas usage. APA owns and operates over 15,000 km's of high pressure gas transmission pipelines across Australia.

Gorodok Pty Limited and East Australian Pipeline Pty Ltd (**APA**) owns and operates the Moomba to Sydney Ethane Pipeline and the Moomba to Wilton Natural Gas Pipeline, which are located within a 24.385-metre wide easement on a north-east alignment within and adjacent to the subject site of Lot 55 on DP1141136 (see Table 1 for details):

Table 1: Transmission gas pipelines in the area of consideration

Pipeline	Pipeline Licence	Easement Width (m)	Diameter (mm)	Measurement Length (m)
Moomba to Sydney Ethane Pipeline	15	24.385	200	600
Moomba to Wilton Natural Gas Pipeline	16		850	795
Note: measurement length is applied to either side of the pipeline.				

APA statutory obligations

SEPP (Transport and Infrastructure) 2021 states that risks associated with development applications adjacent to a gas pipeline corridor needs to be assessed and those risks included in considerations prior to determining an application for development (Subdivision 2 'Development adjacent to corridors'). The EIS considers the SEPP in relation to the delivery of solar energy infrastructure, but does not give any consideration in relation to the potential impacts on existing gas transmission infrastructure of regional importance. This should be addressed in a revised EIS.

APA Group comprises two registered investment schemes, Australian Pipeline Trust (ARSN 091 678 778) and APT Investment Trust (ARSN 115 585 441), the securities in which are stapled together. Australian Pipeline Limited (ACN 091 344 704) is the responsible entity of those trusts. The registered office is HSBC building, Level 19, 580 George Street, Sydney NSW 2000.

energy. connected.

As a licence holder for high pressure gas transmission pipelines (HPGTPs) APA has statutory obligations under the *Pipelines Act 1967 (the Act)*. The associated *Pipelines Regulation 2013*, states that a licensee must ensure that the design, construction, operation and maintenance is in accordance with Australian Standards 2885 (AS2885). These are the Standards that APA must consider in assessing and addressing risks associated with development applications under the Infrastructure SEPP.

In considering a development proposal APA is obligated to ensure its pipelines are not damaged, nor subject to development which may increase the future risk of damage. Furthermore, APA must ensure the pipeline is designed to "*reflect the threats to pipeline integrity, and risks to people, property and the environment*" (AS2885.1, s4.3.1). The subject pipeline has a ML each side of the pipeline of the distances shown in Table 1 above.

AS2885.1, s2.6 states "*a pipeline in the vicinity of electricity supply powerlines or facilities shall be analysed to determine if controls are required to provide for electrical safety*". Section 2.6 refers to Appendix R, which references the requirements of AS4853 for electrical analysis (earth potential rise and low frequency induction). Potential impacts arise from transmission lines crossing the pipeline or running alongside the pipeline. In addition to impacts directly on the pipeline, electrical currents have the potential to impede the effective operation of cathodic protection measures (addressed in AS2832). Electrical currents of concern may include feeder lines, transformers, and transmission lines.

Pipeline Risk Profile and the Measurement Length

In managing HPGTP's and considering land use changes, APA must focus on that area geographically defined by AS2885 as the Measurement Length (**ML**). The ML area is the heat radiation zone associated with a full-bore pipeline rupture. APA is mandated to consider community safety in the ML due to the high consequences of pipeline rupture to life, property and the economy.

The ML is determined by the diameter and Maximum Allowable Operating Pressure (**MAOP**) of the pipe. APA must consider any changes of land use within the ML area to determine the effect of a new use on the risk profile of the pipeline.

For reference, the ML of the Moomba to Sydney Ethane Pipeline is 600m and Moomba to Wilton Natural Gas Pipeline is 795m. The greatest ML applies in this instance. Note that the ML is a radial dimension, and therefore applies to both sides of the pipeline.

Safety Management Study

AS2885 requires a Safety Management Study (**SMS**) to be undertaken whenever the land use classification of land within the ML changes. The purpose of an SMS is to assess the risk associated with a change in land use, including both construction risks and ongoing land use risks. The SMS will also develop appropriate controls to reduce risks to 'as low as reasonably practicable' (**ALARP**).

It is APA's assessment that the proposed development will likely require an SMS to be undertaken due to the large-scale solar farm proposed and associated works expected in proximity to APA's pipelines.

The cost of undertaking an SMS including any mitigation measures required are to be borne by the proponent as the 'agent of change'. APA has developed a list of preferred SMS facilitators. This ensures facilitators are both independent and satisfactorily qualified to undertake this assessment. This list is available from APA on request. Mitigation measures may include slabbing of the pipeline, additional signage, marker tape, and controls during construction.

Easement Management
APA's pipelines and associated easement are located on a north-east alignment through a portion of Lot 55 on DP1141136. The following details regarding easement management are therefore provided for general information.

To ensure compliance with the safety requirements of AS2885, APA needs to ensure our easement is managed to an appropriate standard. This includes:

- Ensuring the easement is maintained free of inappropriate vegetation and structures.
- Place warning signs at various mandated points along the pipeline route, including any change in property description/boundaries.
- Maintain a constant line of sight between warning signs.
- Undertake physical patrols and inspections of the easement.

APA will not accept outcomes that do not enable us to achieve our safety responsibilities to the surrounding community. Crossings of the pipelines should be at 90 degrees and minimised as much as possible.

Any proposed works within the easement must be approved prior to works occurring, by APA through our Third Party Works Authorisation process. This process will ensure all works are undertaken in a safe manner that does not physically impact on the pipeline. Anyone seeking to undertake works on property containing a pipeline, or are seeking details on the physical location of the pipeline, please contact Dial Before You Dig on 1100 or https://www.1100.com.au/ or APA directly at APAprotection@apa.com.au.

Proposed Development
The proposal plan indicates the development footprint is located adjacent to APA's pipeline and easement and proposes electricity infrastructure crossings and electrical infrastructure structures (battery storage) adjacent to the pipeline easement.

The following information is provided as advice for the proposed Marulan Solar Farm scoping report and broadly outlines APA's requirements for inclusion within an EIS.

Safety Management Study
It is APA's assessment that the proposed development will likely require an SMS to be undertaken due to the large-scale solar farm proposed and associated works expected in proximity to APA's pipelines. This SMS will ensure the ongoing integrity and safety of areas surrounding the pipelines. The SMS must be completed prior to detailed design, so that the outcomes of the SMS can inform this process. The cost of the SMS and any resulting recommendations must be borne by the development proponent.

Electrical Interference and Hazard Studies
Electrical works near the pipelines (including crossings) have the potential to impact on the pipelines safe operation and studies in accordance with AS4853 are necessary. The cost of these studies and any necessary mitigations must be borne by the development proponent.

Pipeline Crossings
APA seeks to minimise the number of crossings and have these perpendicular to the pipeline if possible. This should include the co-location of road and services crossings. No work on the easement, including crossings, changes in ground level or other works, may occur without the prior authorisation of APA. Detailed design for crossings will need to be informed by field works to positively locate the pipeline (alignment and depth). Such field works must only be performed under APA permit.

Crossings of underground services must accord with APA requirements, particularly minimum separation distances. Road crossings for heavy vehicles will require a concrete slab crossing to disperse loads on the pipeline to an acceptable level. This will need to be designed to APA requirements. Vehicular crossings during construction and operation will need be at the agreed crossing points.

Pipeline Easement Plan Notation

APA's pipeline easement should be clearly marked as being for a high pressure transmission pipeline easement. This is to ensure the level of risk associated with any intrusion into the easement is adequately communicated to those undertaking future site works. The easement should be clearly identified as an easement for a high pressure transmission pipeline on all relevant plans. In addition the easement should be hatched and notated as *'no works to occur without the prior authorisation of the pipeline operator'*.

Pipeline Database

The pipeline industry, led and coordinated by the Australian Pipelines and Gas Association, has established the Australian Pipeline Database. This is a GIS based database that identifies all high pressure pipelines including the owner of the asset and subsequent contact details. This database is available under license, free of charge to government planning authorities. The database also allows Planning Authorities to export pipeline information for use within their own GIS systems.

The use of this data will assist Planning Authorities determine if strategic or statutory planning proposals are in the vicinity of a HPGTP and liaise with the Pipeline Licensee accordingly.

The Database can be accessed from the following link:
https://maps.landpartners.com.au/apd/

Comments

As more details of the proposal become available through the proposed EIS process, APA would be happy to provide further advice to assist with the Solar Farm layout plan design.

Note

If you are planning on undertaking any physical works on property containing or proximate to a pipeline, or are seeking details on the physical location of a pipeline, please contact Dial Before you Dig on 1100, or APA directly on APAprotection@apa.com.au.

Note

An early works agreement from APA is required for any assessments/approvals that require greater than 3 days assessment or supervision. Lead in times for agreements can be up to 12 weeks. Please contact APA at APAprotection@apa.com.au or 1800 103 452.

Note

Any improvements within the transmission gas pipeline easement undertaken by third parties is at the risk of the proponent who will remain liable. APA will not be liable for any costs associated with the reinstatement of any vegetation and/or infrastructure constructed on the easement.

Conclusion
APA does not seek to unnecessarily inhibit future development proximate to our assets and is happy to work with development proponents to achieve mutually acceptable and compliant outcomes.

Should you wish to discuss the contents of this correspondence, or have any further queries, please contact me on 07 3223 3385 or the Infrastructure Planning & Approvals team at planningnsw@apa.com.au.

Yours faithfully

John Lawson
Senior urban Planner
Infrastructure Planning and Approvals