the australian PIPELINE industry association Ltd

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Business Regulation Benchmarking
Productivity Commission
Via email: planning@pc.gov.au

Comments on the Draft Research Report for the Performance Benchmarking Review of Australian Business Regulation: Planning, Zoning and Development Assessments

The Australian Pipeline Industry Association (APIA) welcomes the opportunity to comment on the Productivity Commission's Draft Research Report for its Performance Benchmarking Review of Australian Business Regulation as it related to Planning, Zoning and Development Assessments.

APIA would like to take this opportunity to raise a significant matter in relation to planning, zoning and development assessments that impact on the community and on operators of high-pressure gas and liquid petroleum pipelines around Australia. Currently, there is an inconsistent approach to planning, zoning and development decisions across Australia and this has led to increased land development costs for land users and additional business compliance costs for high-pressure pipeline operators. This in turn can lead to greater costs to gas consumers and can impact on public safety.

High-Pressure Pipelines in Australia

Onshore high-pressure pipelines are licensed and regulated by State pipeline regulators under State Acts and Regulations. All State Acts and Regulations require all high-pressure pipelines to be designed, constructed, operated and maintained in accordance with Australian Standard *(AS) 2885: Pipelines – Gas and Liquid Petroleum.* This standard exists to ensure protection of the pipeline, which in turn ensures the safety of the community, protection of the environment and security of gas supply to users. The consistent, national application of this Standard has ensured an enviable safety record for gas pipeline operation in Australia.

Land Use and Pipeline Design

Under the Australian Standard for gas and liquid petroleum pipelines, AS2885, a pipeline licensee must, at the time of construction, design a pipeline to have due consideration of the risks to the pipeline from the surrounding environment and the consequences to the surrounding environment from a pipeline failure. Pipeline design can readily account for current and known or anticipated future environments but pipelines have operational lives potentially in excess of 80 years, and the environments around them change over time. This is particularly true on the urban fringes of expanding towns and cities.

AS 2885 requires the pipeline operator to define a primary location classification and, where necessary, a secondary location classification within the pipeline "*measurement length*". A location classification is based on an area's current land use and identified future land use, and the pipeline design must factor in the risks and consequences of these matters. A pipeline's measurement length is defined in AS2885 as the radius of the 4.7 kW/m^2 radiation contour for a full bore rupture. kW/m^2 is a measurement of heat intensity. An exposure of 4.7kW/m^2 can cause serious injury after 30 seconds exposure.

The measurement length for a particular pipeline depends on its operating pressure and diameter. For a major high-pressure gas pipeline, the measurement length will be hundreds of metres. Lower pressure pipelines have a measurement length measured in the tens of metres.

If there is a change in the location classification of a pipeline, or construction activity is proposed on or adjacent to a pipeline corridor/easement, AS2885 requires a detailed Safety Management Study to be undertaken, which incorporates a risk assessment. As the classification of a location changes from rural to residential, the level of pipeline protection required for that location generally increases to ensure protection of the pipeline and to manage the risk to people, property and the environment.

When developments and land use changes occur around a high-pressure pipeline, the safety and risk profile of a pipeline can be impacted in two ways:

- The construction activity of a development presents increased short term risks to the safety of a pipeline. These risks are usually offset through increased site supervision and temporary protection of a pipeline during the construction phase of a development.
- The development may alter the location classification of an area around a pipeline, increasing the long-term risk of third-party interference and/or increasing the consequence of a failure in the pipeline. These risks may need to be offset by permanent protection measures for a pipeline if the original pipeline design does not mitigate the risks identified.

Decisions across the whole planning regime including high level state planning, regional planning managed by councils and development applications within planning zones may impact on the pipeline safety profile.

Permanent protection measures can be costly to retrofit, and there are recent examples where stakeholders have incurred expenses in the hundreds of thousands of dollars as a result of inadequate information and a lack of early, formal engagement in the first stages of a planning process.

Public Safety

As indicated above, a high-pressure pipeline carrying natural gas or liquid petroleum has the potential to impact a large area in the event of a full bore rupture. The Australian pipeline industry has an enviable safety record but the potential remains for a pipeline failure to have a significant impact on the community, environment and security of gas supply. This places high-pressure pipeline infrastructure in a unique situation compared to other linear infrastructure, which has minimal potential to impact beyond the immediate vicinity of the infrastructure easement.

Jurisdictional Approaches

The treatment of high-pressure pipelines varies substantially across jurisdictions in Australia. For example, the Tasmanian Government has legislated Pipeline Planning Corridors at a distance of 1m per mm diameter of the pipeline around major pipelines, allowing a pipeline operator the right to be notified of all development applications within the corridor so determined and the opportunity to recommend safety conditions be imposed on development applications. A very different example is, in some jurisdictions, there is no specific requirement to consider impacts on high-pressure pipelines. The majority of jurisdictions fall somewhere in between these two examples, with some consideration being given to consulting with high-pressure pipeline owners and operators, but rarely the right for the pipeline owner to have early, formal engagement in the planning process.

The difficulty is further compounded when considering treatment of different types of linear infrastructure. The treatment within a jurisdiction of electricity, road, rail, telecommunication and pipeline infrastructure varies widely. In some cases, owners of electricity infrastructure enjoy mandatory notification but owners of pipeline infrastructure do not. This can be related to whether or not the particular infrastructure is Government owned. APIA is aware of some pipelines that have enjoyed the status of referral agencies in the past, but upon privatisation have lost referral agency status.

APIA would be happy to provide the Productivity Commission with more information on the various legislative treatments of high-pressure pipelines across jurisdictions in Australia.

Solution

The pipeline industry accepts that changes in land use around high-pressure pipelines will occur from time to time, but the industry emphasises that any change should be carefully considered in order to ensure that the pipeline design continues to be compatible with the new land use classification.

APIA is proposing the concept of a ***notification zone*** around high-pressure pipelines, within which the operators of high-pressure pipelines are granted the rights of a referral authority.

With such a notification zone in place, planners would be prompted to alert the pipeline operator of an intended land use change. By early inclusion of the pipeline operator in deliberations, developers and planning authorities will ensure that pipeline safety and cost implications are available to inform land use planning.

Summary

There are inconsistencies in the way planning, zoning and development assessments take place within and across jurisdictions in Australia, particularly in relation to notification and referral to operators of linear infrastructure about potential changes to land use.

The potential impact of the failure of a high-pressure gas and liquid pipeline is significantly greater than that of other linear infrastructure and this reinforces the importance of early notification and referral to the pipeline operator regarding proposed changes that may lead to a revision of location classification.

Until such time as these inconsistencies are adequately addressed, uninformed development proponents can incur considerable unnecessary costs in ensuring public safety is maintained.

APIA recommends that the Productivity Commission should identify the need to address the lack of national consistency in the treatment and consideration of existing and future linear infrastructure requirements and, in particular, the provision of early notification and referral to pipeline operators of proposed land use changes.

Yours sincerely

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