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Q1:	Do you agree that the overall	Yes. Vector believes economic efficiency is an important consideration for policy development, particularly where the incentives for investment in infrastructure and exploration may be impacted.
	be to facilitate access to gas	Vector notes that it is not clear that a problem exists in relation to the gas processing market which requires intervention. In this respect the approach proposed by the GIC will identify whether there is robust evidence of a policy issue.
	processing facilities where that is both economically efficient and contributes to	A more intrusive approach would have to recognise the potential consequences of mandated access. It should be recognised that the issue would have to be of national significance to justify an intervention that forces one participant to contract with a party with which it may not normally choose to do business. For example, it may be necessary for the regulator and/or the Government to arbitrate disputes and to underwrite any consequential capacity investment.
	better achievement of Government's overall policy	 In Vector's view, the potentially relevant drivers for this policy development are to: increase gas supply; and increase competition in vertically related markets.
	objective, taking account of the specific outcomes it expects of the sector? If not, what should the objective be?	To increase gas supply (as the Gas Act's wording tends to indicate), the analysis would need to consider the economics of the field as a whole as the condensate revenue may or may not be sufficient to justify field development. In the case of a gas only field, the analysis would need to consider if a greenfield development is economic. In either case, these assessments should take place as a first step. Intervention should only be considered in preference to commercial arrangements if field development could not proceed without access to existing processing facilities.
		To increase competition in vertically related markets, the analysis would need to consider the national significance of the facility as a non-replicable asset. There would also need to be a robust assessment of the net benefits of intervention and to what extent competition is increased in upstream and downstream markets. For a new field to impact vertical markets, it is likely that it would be of sufficient size that a greenfield development would be economic.
		Vector believes that the primary driver for this policy requirement in the GPS is to increase gas supply. In a wider sense the more significant policy issue is to create a positive environment for capital investment in the gas sector in New Zealand by minimising the barriers to gas exploration and development which requires consideration of many more factors than simply access to processing facilities.

Q2: Do you agree with the proposed definition of gas processing facilities for the purpose of considering	Mostly with two refinements. Liquid storage facilities should only be included where they form an integral part of the processing facility under consideration. They should not be considered on a standalone basis or when they are associated with downstream distribution operations rather than processing itself.
access protocols?	 Gas gathering pipelines should be excluded from the definition on economic grounds as they are low cost, easily replicable and pose no barrier to entry. Furthermore, from a practical perspective existing gathering pipelines may not be used for new third party gas when access is provided as mixing the raw gas streams: may devalue one or other streams (egg mixing rich and lean gas); result in unnecessary processing of one stream (egg mixing high and low CO2 gas); prevent different levels of processing (egg extent of liquids extraction); and result in undesirable gas blends within the gathering pipeline itself.

Q3:	Do you agree that the framework outlined in section	Vector largely agrees with the framework outlined. In order to preserve incentives for infrastructure investment, it should be demonstrated that the facility is a bottleneck rather than the access seeker simply preferring to apply their capital elsewhere. The facility owner may also wish to apply its capital elsewhere.
	5 IS suitable for identifying whether there are substantial inefficiencies arising from	In this respect the paradigm of an "essential facility" as outlined in the Australian access regime provides some guidance. Specifically, the asset is a nationally significant facility which has material competition benefits in vertical (upstream or downstream) markets. Given the progress made by the GIC on this issue, it is not necessary to revisit the analysis however this concept is one that the industry should keep top of mind as it develops policy going forwards.
	current	
	access to gas	
	processing	
	tacilities? If not, what alternative	
	framework would	
	provide a superior assessment?	

Q4: Do you agree with the technical/economi c assessment presented in section 6?	In general, Vector agrees with the assessment, however the consideration of the cost of gas gathering pipelines appeared to identify the upper end of likely costs for Taranaki. Vector believes that gas gathering pipelines should be excluded from the definition as they are low cost, easily replicable and pose no barrier to entry. At the high level, the access issue involves a field developer evaluating a brownfield opportunity versus a greenfield development using a range of quantitative and qualitative factors. A brownfield opportunity is very likely to involve a lower level of capital expenditure and lower operating costs ¹ . However, the economic advantage of these factors (in net present value terms) will vary depending on the relative location of the brownfield site, the degree of spare capacity, and the compatibility of the plant configuration with the processing requirements of the new gas. The commercial interfaces, project complexity and demands on critical management time are substantially increased with a brownfield development. There are a range of economic and risk factors that can offset the economic advantage of lower capital and operating costs which will often result in a decision being made in favour of a greenfield development. Some of these factors are: • the opportunity to design and operate the plant to maximize the value from the respective gas and liquid streams: • the potential benefits from plant de-bottlenecking opportunities in the future: • its own culture and applying best practice standards in areas such as manning levels and safety: • avoiding the complexity of negotiating a tolling agreement which has the potential to delay field development; • the flexibility to modify plant operation without consultation; and • avoiding the risks associated with modifying an existing plant. Consenting requirements are likely to be similar for both options, however, the risks of consenting delays and cost increases are unlikely to be covered by the owner yet they control the process. Wh
	While one might superficially conclude that greenfield and brownfield are substitutable; in reality each development has its own characteristics which means that sharing facilities with an owner/user is not attractive or profit maximising. Unlike assets which are uneconomic to replicate and offer a standard service, gas processing is field specific. In practice, a greenfield development has significant advantages for the field owner. A policy intervention is not going to alter the technical, commercial and physical realities, so the contract will need to be field specific and address each issue in turn.

¹ The tariffs should be based on replacement cost or option value of the facility to encourage economically efficient decision-making.

Q5: Do you agree with the conclusion that there do not appear to be substantial inefficiency problems with access to gas processing facilities?	 Yes. As illustrated in the discussion document, there is a wide range of processing facilities with a diverse ownership (including ownership proportions). With the possible exception of Oaonui which is somewhat isolated geographically³, most onshore Taranaki developments would have several processing facilities within reasonable proximity. It is reasonable to presume that most owners of spare or developable processing capacity⁴ would act in an economically rational manner and seek commercial arrangements to utilise that capacity. Vector has been involved extensively in gas processing developments in the past. The practical reality in the New Zealand gas processing market is that: There are a large number of processing facilities which have been built for both small and large fields; It is not apparent that lack of access to processing has resulted in gas fields not being developed; There have been instances of access being offered willing, but the field owners have chosen to proceed with greenfield developments for commercial reasons other than the inability to reach satisfactory access terms; and It is not apparent that a commercial problem exists.
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² Engineer Procure Construct.

³ Given Oaonui's capacity and capability, its location may not be a barrier for a significant field development.

⁴ It should be noted that the owners may have plans for spare capacity so there is an option value which needs to be considered in any assessment.

Q6:	Do you agree that alternatives to the status quo that may meet the objective are limited to low cost, light-handed measures?	Yes. As outlined above, it is not clear a significant problem exists. In answer to Question 4, Vector outlined some of the field specific factors which are liable to make generalised policy solutions complex and ineffectual.
		For instance, the provision of access to a gas processing plant for additional fields will almost inevitably require additional capital spending by the plant owner, either to provide additional capacity or to meet the particular requirements of a different gas/condensate stream. It is very unlikely that there will be situations where access by a third party will not require some adjustment, enhancement or modification of existing operations.
		Regulated access would therefore require forced capital spending by the owner. However, processing plant owners with diversified operations (as is the case with all current plant owners) have choices of how to spend their capital budgets, including in other sectors and countries. Capital budgeting decisions depend on a number of factors, including hurdle rates of return, growth objectives, strategic alignment, contribution to competitive advantage, risk appetite and asset maintenance. In many instances, including periods of low commodity prices, there may not be any capital available. It would be inappropriate to impose capital budgeting decisions in these circumstances.
		Furthermore, gas processing plant operation and capacity enhancement involves complex trade-offs between reliability and cost. Regulated access is likely to produce sub-optimal results. Field life and reserves uncertainties would add further complexity to the design of a regulatory access regime. Given that it may be near impossible to predict the conditions associated with an access intervention in future, it would seem prudent at this point to not commit time and resources to developing a detailed protocol which may have to be substantially revised when applied to "real" case.
		Vector believes negotiated access is much more likely to produce appropriate capital expenditure, risk taking, risk allocation, and cooperation between field developer and processor.

Q7: D th a in d p o o v w	bo you agree with the assessment and that aformation isclosure is the referred means f meeting the bjective? If not, thy not?	 Yes. Vector believes the proposal is the most appropriate approach. The information disclosure regime will facilitate contact between plant owners and potential access seekers by clarifying what capabilities and capacities may be available. By monitoring the number and outcomes of bona fide requests for access, the GIC will establish a robust base of information to identify if any further policy development is warranted and, if so, on what issues. Alternatively, if either a detailed access protocol or model contract was to be developed, there are a number of practical issues that would need to be considered during its design in addition to policy principles. Some of the significant issues are: The feasibility and impacts of altering gas supply to existing processing plants. Gas composition varies significantly between and within fields, so there are complex technical issues to be addressed when mixing non-specification gas; The quality, cost and revenue impacts on current processing which includes the production of Natural Gas Liquids (NGLs); The impact on the asset owner's own development options; The effect of processing a third party gas on top of another third party gas and effect on production ratio of NGLs. In this case the new party impacts not only the asset owner's production, but also the contractual arrangement between the owner and the other party;
		 The potential for dispute and litigation between unwilling parties to an access agreement. It is likely that the regulator or the Government would have to adopt the dispute resolution or arbitration role and where appropriate provide indemnity; and The Government may have to underwrite the any investment resulting from regulated access as the access seeker may not have the financial resources or be of suitable creditworthiness for the asset owner to otherwise proceed.
		Similarly, the cost benefit analysis to invoke the access protocol or model contract would have to assess a wide range of factors.
		Vector believes that given these practical implementation issues it is not realistic that an access protocol or model contract developed could possibly contemplate every potential issue which might arise in a negotiation in relation to a specific field or processing facility. Clearly one size does not fit all.

Q8:	Do you concur with Gas Industry Co's assessment that the industry be invited to adopt a voluntary information disclosure regime? If not, please give your reasons.	Yes. In Vector's view, the GIC should seek commitment from the industry in parallel to developing the detailed disclosure requirements.
		The GIC should take the opportunity to clarify the treatment of confidential information provided under the regime. Among the questions the industry may have are:
		 Is it to be held by an external party and only reported in aggregate to the GIC Board which includes industry participants;
		 At what stage of an access proposal do participants need to inform the GIC, as the fact as well as the nature of the negotiation may be commercially sensitive; and
		 At what point, and through which process, does confidential information about an access approach transition to the public domain.