Long-Term Gas Contracts: Past, Present and Future

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SUMMARY

Long-term gas contracts are the result of commercial negotiations and prima facie must be assumed to represent the collective desires of the parties to them. While there are some features that are more common than others, each contract is likely to be unique. There is a danger of generalisations about long-term gas contracts overlooking these important features.

The geology and geography of Australia has been a major factor in shaping the structure of the gas industry in Australia. The desire for customers to have security of supply as well as the need to underpin investments throughout the gas supply chain, derives partly from this geology and geography. The features of the length of contract (the "long" in long term) and Take or Pay provisions (or their equivalent such as reservation charges in pipelines) are also in a large part a result of these factors.

UK and US experiences, whilst useful to look at, are not good models to blindly copy. Much of the reform in these countries was necessary because the regulators got it so wrong in the first place. The Australian industry has never had the worse deficiencies of the UK and US experiences.

Australian ex-field and city-gate prices have been, and continue to be, significantly cheaper than in the UK and US. This is a most telling factor as to the efficiency of the Australian industry structure.

Focusing on the strengths of the Australian gas industry and working out why the upstream sector has consistently provided competitive gas supply, would lead one to conclude that long-term gas contracts will continue to be the norm in Australia for quite some time to come.

COMMENTS ON THE TRIMBLE PAPER

Generalisation

Niall Trimble was given 10,000 words in which to provide you with an expose on the subject matter of long-term gas contracts - past, present and future. The only way in which Niall could possibly do this

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is by significant generalisation. The fact that he also needed to bring the reader's attention to what has happened with gas contracts in the UK and US (and a few other European countries) exacerbates the problem. In my opinion, there is a very great danger that by virtue of his generalisation, the issues have become over simplified. In addition, I consider that where he outlines issues or behavioural problems in terms of gas contracts in the past or the present, the solution proposed for the future suffers the same problem of over-simplification.

I face two dangers in providing the commentary on Niall's paper and my own views on the subject matter. The first is that in 5,000 words, I will also be guilty of not only my own generalisations, but also in spending most of my words in criticising the ones Niall makes. I have therefore studiously tried to avoid this, but probably failed! The second danger is that my commentary is based on a draft of Niall's paper and I can only hope this commentary makes sense when reviewed with Niall's final paper.

Niall's paper describes some form of "generic" gas contract and I do not have too many quibbles with his outline of such a contract, but I do strongly urge the reader of the paper to recognise that it is a generalisation. Santos is involved in gas contracts in the UK, the US and in Australia. In Australia, we are currently party to 36 gas contracts with an annual value for each contract ranging between \$2.5 million and \$300 million. We are also party to a number of contracts with a lower value. I cannot give you specific details on any one of these contracts because of confidentiality clauses, but what I can tell you is that no two are identical. In some cases, the differences are only minor, but in other cases, they are substantial. Many of our contracts incorporate the items which Niall has described as the elements of gas contracts, but not all of them incorporate the elements in the way Niall has described and some of them do not even include some of the elements.

You may ask why I am focusing on this question of generalisation. The reason is that Santos is an experienced practitioner in gas contracts in three countries, including the two (UK and US) which are often used as the models from which Australia should learn. What our 30 years of experience in gas contracting tells us is that each individual contract is the result of lengthy and vigorous negotiations between arms-length commercial parties. If the contracts include certain conditions, such as the length (or term) of the contract or involve Take or Pay etc, it is only because this is the outcome of those commercial negotiations, not because some government body or economic theory mandates such matters. In some instances, the structure of the industry in Australia has helped shape the contract (for example the early contracts being shaped by the fact that no pipelines or even natural gas industry existed). Certainly, in every contract there will be many provisions that one party or the other might prefer be different. But at the end of the day, the contract is a compromise between the competing interests and the compromise is accepted by both sides. One

would have thought that negotiation between two competing interests is a natural part of a healthy competitive environment and outcome.

It is very easy to write generalisations which superficially appear logical. An example is where Niall describes the price escalation provision within contracts. Here Niall states that

"from the Buyer's perspective, the ideal is to include those fuels with which gas competes in the market-place such as Gas-Oil and Fuel-Oil. As their price rises (or falls), the price of gas will be adjusted accordingly and hopefully will keep the Buyer competitive. The Seller's perspective varies. But many of them are attracted to the use of inflation type indicators such as CPI for the stability and predictability it brings to their cash flow".

This description sounds very logical and one would generally accept it and read on. However, when I first became involved in gas contracting 25 years ago, my first three years were spent arguing with customers because the producer's perspective was to include an escalator related to the market place whereas the customer's perspective was to have an escalator based on CPI. The exact reverse of what Niall describes. Certainly, over the 25 years of my experience in Australian gas contracting, I have seen both sides "wax and wane" over what escalator they prefer. For example, when inflation was running rife in Australia, the producers became more interested in CPI escalation. When oil prices escalated rapidly, the producers wanted gas prices tied to oil. Not surprisingly, the purchasers under the contracts wanted the opposite at both times. However, even today the reverse of what Niall describes is probably true in Australia when one is dealing with retailers. What Niall says is probably more correct in terms of end users, but even then, as he points out, financiers may push some end users towards CPI escalation.

Upstream and downstream industry

Before I address three specific areas of Niall's paper, there is one other generalisation which I would like to make that does not specifically relate to Niall's paper. This relates to the common tendency for almost all commentators on the gas industry to inadvertently (or perhaps in some cases, deliberately) mix up issues associated with the upstream industry and the downstream industry. My definition of the upstream industry incorporates the exploration for, and production and development of, natural gas. The upstream industry tends to sell gas as soon as it becomes in marketable form on an "ex-field" basis. This "ex-field" concept is sometimes expressed as "at the beach" in UK terminology. The downstream industry consists initially of the network of pipes which transport the gas to the ultimate consumer. This, in turn, is generally broken into two components, the first being the long distance transmission pipelines which move the sales quality gas from the point of production to the major consuming regions, and the second being the reticulation systems which move the gas around the major consuming regions to

individual consumers. In addition to transmission and reticulation, the downstream industry contains the marketing or retail function of selling the gas to individual customers. It is amazing how often a commentary on upstream matters suddenly starts addressing issues which are really related to the downstream industry. To Niall's credit, he does not do this to any great extent in his paper but I do perceive that he has an inclination towards wanting "upstream" reform to solve problems with either downstream activities or the geology and geography of Australia. I will address this when I look at the section on the lessons we can learn from the UK.

The role and content of long-term gas contracts

I would now like to address the specific topic of the role and content of long-term contracts. In the first instance, I would suggest that there are a number of places where two items are linked together in Niall's description of long-term contracts with the implication that they are in some way strongly inter-related but where I would like to point out that they are not mutually exclusive. For example, it is quite common to link the issues of the length of contracts (that is the "long" in longterm contracts) and Take or Pay provisions as if they are somehow exclusively related to each other. While it is true that most long-term contracts will have Take or Pay clauses, this is not necessarily true in all cases. Long-term contracts can incorporate a fixed and variable charge (such as in the case of transportation contracts with a reservation and through-put charge) which may do away with a Take or Pay clause. Of equal or perhaps more relevance for the purpose of my commentary is the fact that most short-term contracts also have a specific or effective Take or Pay clause. To me, when you sign-up to buy a new vehicle from a Toyota dealer, you have entered into a 100 per cent Take or Pay contract with the vendor, albeit the contract is of extremely short term. The same holds true in a number of short-term gas contracts where the buyer is effectively obliged to take the volume of gas it has contracted for and thus has an effective 100 per cent Take or Pay contract. I will come back to the issue of Take or Pay clauses when I address my view of the future.

Another example of often overstated inter-relationships that I draw your attention to is where the concepts of security of gas availability and predictability of price over the long term are linked together. I certainly accept that one of the major features of long-term contracts is to provide the security of gas availability, but believe that there is a wide variation in the likelihood of predictable prices being a common feature of long-term gas contracts. In any event, I am not exactly sure what Niall means by "predictable price". For example, is it predictable because it will not change, or because it will only change by a defined and known number, or because it will only change by a defined linkage but to an unknown (and hence, unpredictable) amount? Clearly, the greatest level of predictability of price is given by a fixed price contract (that is without escalation over the life of the contract).

Some very early long-term contracts in Australia had this feature and some of those are still operative. However, with escalation clauses tied to CPI (which is of uncertain outcome), or a fuel alternative (which is of grossly uncertain outcome) or with price review provisions to vary the price to market, the concept of price predictability is only true in a very limited context. The Santos contracts to which I am privy cover a wide range of pricing mechanisms (from no escalation, to CPI indexed (either partially or fully), to fuel indexed, to some other commodity indexed, to price review – or a combination) negotiated to suit the specific requirements of the relevant customer.

Pricing and long-term contracts

In the description Niall gives of the situation in the UK, I believe there is some over-playing of this link between pricing and long-term contracts. In referring to what he describes as "the cataclysmic event of 1995", Niall opines that independent gas companies "perceived that to hold long-term contracts at a time when prices had fallen was to disadvantage yourself in the market-place". This, of course, relies on the unstated factor that the long term contract did not allow the price to move in line with the market which may have been true for some contracts in the UK, but certainly not for all of them (including, for example, the Santos experience in the UK). What may be of equal relevance is the time lag for contractual terms to come into play (for example, due to the delay between the price of alternative fuels falling/rising and either the annual escalation provision or the (say) triennial price review in the contract). However, there is no reason why a provision of a long-term contract cannot have the price being set on a day-to-day basis by the spot market, where a spot market exists. In fact, in the US, the spot market price is generally the contract price but with some averaging provisions. The two factors of longterm contracts and competitive pricing are not mutually exclusive. Also, I note that Niall specifically refers to the perceptions of independent gas companies. I understand this to mean retailers, but end users may have a different view. From my discussions with a number of end users, they are extremely concerned about wild and unpredictable fluctuations in the spot market and they are readily willing to trade-off the opportunity loss of missing out on very low prices at some times in return for ensuring they are not exposed to very high spot prices at other times.

Lessons from the UK and US

I would now like to turn to the question of what we can learn from the UK and US and, in fact, to turn the tables around on Niall and suggest to him that if those markets had followed the most salient features of the Australian market for the last 30 years, then they would not have required the extensive reform that they have needed. In a number of places, Niall refers to what he obviously thinks is an

adverse difference in market structure in Australia compared with the UK. In the introduction, he refers to "the more open markets in Britain". In expanding on this matter, within Section D of the paper he states: "The gas market in Britain has been open for a relatively long period.... The process started in 1982". In Section E, Niall asks the hypothetical question: "What are the prospects for markets opening up in Australia?" I would suggest that these comments cover both the downstream and the upstream industry structure but are more applicable to downstream constraints. I further suggest that the markets in Australia in the upstream industry have been pretty well wide open since the inception of the industry in the late sixties. However, in the UK, and even more in the US, the upstream markets have been heavily regulated and it is only in recent times that those two countries are getting anywhere close to the position where Australia has been for 30 years. I accept that this is not true in respect of the downstream industry. I refer back to my earlier point about the importance of differentiating between upstream and downstream matters to ensure one does not too readily flip from one to the other. I also accept that in both the UK and the US, a spot market in gas has developed and this is a feature that is of extremely limited extent in Australia.

In the UK, the upstream market was heavily constrained by the role of British Gas being the only party that an upstream producer could deal with. One might suggest that on a State basis, similar situations have occurred in Australia where, because of downstream franchising, there were limited buyers of gas. In addition, within South Australia, for some period, the only purchaser (at one stage by virtue of legislation) was the South Australian government. However, while one can point to instances of similarities, my view is that they do not compare to the effect on the market structure in the UK of the dominance of British Gas. In passing, I note that within South Australia, we went from a very open market structure with multiple buyers in 1969 to a more constrained structure with a single buyer and are now reverting back to the multiple buyer position. Much of this restructuring was the result of commercial negotiation and one must therefore assume the outcome was what the customers wanted at that point in time, no matter how much the structure offends economic rationalists or market theorists.

In the US, the most significant form of market constraint occurred through very heavy handed involvement of government in price setting. Using that wonderful tool of hindsight, it is clear that the US government initially set gas prices too low and then reacted and set them too high for what the market really required. Again, in Australia, while one can point to instances of State government involvement in pricing (for example when it didn't like the result, the South Australian government legislated to reduce the price set by an independent arbitrator under a long-term contract), these instances did not govern the pricing structure of the entire industry.

What we have had in the upstream industry in Australia is a situation where the activities are carried out by private enterprise and, where upon the discovery of gas, those private enterprise organisations have taken the very first opportunity to market their gas. The marketing has taken place through arms-length negotiations with independent purchasers and, notwithstanding that some of those discussions have been protracted and difficult, the end result has been commercial arrangements reflected in the contracts that both sides were happy to sign. I fail to see how one could possibly have a market which is any more open than one which has such features. Without question, the textbook theoreticians can criticise individual elements of the outcome but what makes them think they know better than the market participants themselves. Perhaps the greatest proof of the pudding that the Australian upstream market structure is relatively sound is in the fact that on an ex-field basis, Australian gas prices are very competitive compared to the UK and US. The Industry Commission Report of 9 March 1995 included the following statement:

"Figures from 1991 indicate that while the average city-gate price is significantly cheaper than the average city-gate price in the United States, prices to end users can be more than twice as high as the average prices in the United States."

Given that transportation costs tend to be higher in Australia because of distance, this means that the "ex-field" price is even more

competitive than "significantly cheaper".

To try and counter some of the self-interest and hogwash that is spread by some players in the Australian market and by some regulatory bodies, Santos has taken to making a statement in its public reporting on sales and production that the prices we have received for gas in Australia during the preceding quarter are lower than the prices we have received in both the US and UK.

Unfortunately, and as the Industry Commission recognised, because of the geography and geology of Australia, most gas requires significant cost to get it from the point of production to the point of consumption. This means that the "city-gate" prices in Australia reflect the fact that the extra transportation cost eats up some of the benefits of the lower ex-field prices. This effect is not only the result of distance, but also the fact that many regions of Australia have much lower consumption levels, both on a total and per capita basis, than would exist in the US or UK. This in turn is driven by both climate and population density. These latter two points also result in the reticulation costs for gas in Australia being somewhat higher than they are in both the US and UK.

One of the issues in the gas industry in Australia has been the fact that the reticulation costs and the retail margin have always been lumped together. With the new open access rules, end consumers will be able to more readily assess how much "margin" they are paying to deal through a middle man such as an independent gas marketer or retailer, and whether they are prepared to continue to pay such margins or go direct to producers or swap retailers.

Competition

The final point where I specifically comment on Niall's paper is whether the concept of competition is perhaps being driven for "competition's sake". In Niall's paper, he states: "Clearly the building of a pipeline from Dampier to Moomba ... could accelerate the emergence of competition dramatically." This comment is in the context of what is a common complaint in Australia, that there are limited supply sources (for example, the Cooper Basin supplies all of Adelaide's and Sydney's needs, and the Bass Strait supplies all of Melbourne's needs). People generally regard this as indicative of a lack of competition. There is an alternative view that I would like to put and this is that the limited supply sources are, in fact, indicative of significant competition but with an outcome of one party being well ahead of its competitors. It goes without saying that the people with the gas resource closest to the market will, all other things being equal, have the best opportunity to supply that market at the lowest price, but that if prices increase, people with resources further away will enter the market. I find it amazing that Niall would suggest that bringing gas from the North West Shelf to eastern Australia would be regarded as improving the competitive position in, and of, Australia. I hasten to add Niall isn't the only person I have heard take this position and North West Shelf gas isn't the only alternative source mentioned. Certainly if such events transpire, there will be more competition in the sense there are more players providing gas, but prices will be higher than they are today. As a player in the fortunate position of being able to sell Cooper Basin gas at a price which effectively precludes the pipeline from the North West Shelf being built, I actually wish the scenario that Niall paints was in place today because Santos' operations would be substantially more profitable.

CONCLUSION

In concluding, I will set out my view of the future of the Australian gas industry (in terms of contractual situations). Niall's opinion is that while long-term contracts will continue, they will be of lesser importance in the whole scheme of things. I think any reader of his paper would interpret that he believes there will be a substantial shift away from long-term contracts. Contrary to this opinion, I believe that long-term contracts will remain as the most significant means by which gas is sold in Australia for at least a decade, and more likely two decades. Certainly, there will be a move towards shorter-term contracts, but 10 to 15 years will remain the norm and I would regard these terms as long-term contracts. Some players might look for contracts of one year or less, but I think that if these players are intending to be gas retailers, then they will not be long-term survivors.

Niall, himself, has given the reason for this when he says, in respect of long-term contracts: "probably because it will be the cheapest source of

gas.'

I believe that contract terms will change, but perhaps not in the way that others would predict. In the area of Take or Pay, I feel that contracts will move towards an effective 100 per cent Take or Pay, although the contract won't be expressed as such. There will be a quid pro quo for this via the ability for the purchaser to have a more flexible off-take. The flexibility may include the permitted variations in take over the year, the length of the contract, the inclusion of some interruptible supply or more likely a combination of these.

Within that section of the industry which involves gas being used for electricity generation, contract terms will more closely correlate the interests of the gas producer and electricity generator to ensure they can collectively compete in the national electricity market. I believe that this will take some time to sort through because we are still several years away from the national electricity market being a properly competitive market due to the combination of vesting

contracts and excess generating capacity.

The reasons for long-term contracts existing in the past are often given in a very narrow sense. Reading any paper on long-term contracts will invariably lead you to conclude that the only reason long-term Take or Pay contracts exist is to underpin the large investments necessary, both on the production and downstream ends of the industry. For example, Niall states: "The Take or Pay system has emerged to give gas sellers the confidence to invest in new field developments." He is no orphan in using words such as this and almost every other author and commentator on gas contracts (including me) has for two decades used almost identical words in explaining the logic of Take or Pay clauses. However, I think we have all missed something and too readily adopted the simple and readily available explanation. I have been asking myself, why do Take or Pay clauses still exist in circumstances where neither side to the contract have significant new expenditure obligations? The answer is quid pro quo. If an end user or gas retailer wants to know that it has gas available for the next decade, it is only going to get that certainty by entering into a contract for 10 years. No producer will hold that gas resource in reserve without having some certainty that the other party will purchase the gas which has been "reserved". In my day-to-day involvement in the gas industry in Australia, I see no change in the desire of consumers to ensure that they have long-term supplies committed to them under terms and conditions which they have negotiated in a commercial environment.

For these reasons, I believe that a paper addressing long-term gas contracts and given to the AMPLA Conference in ten years' time would be little different in terms of the outlook for long term gas contracts than the position we are in today.