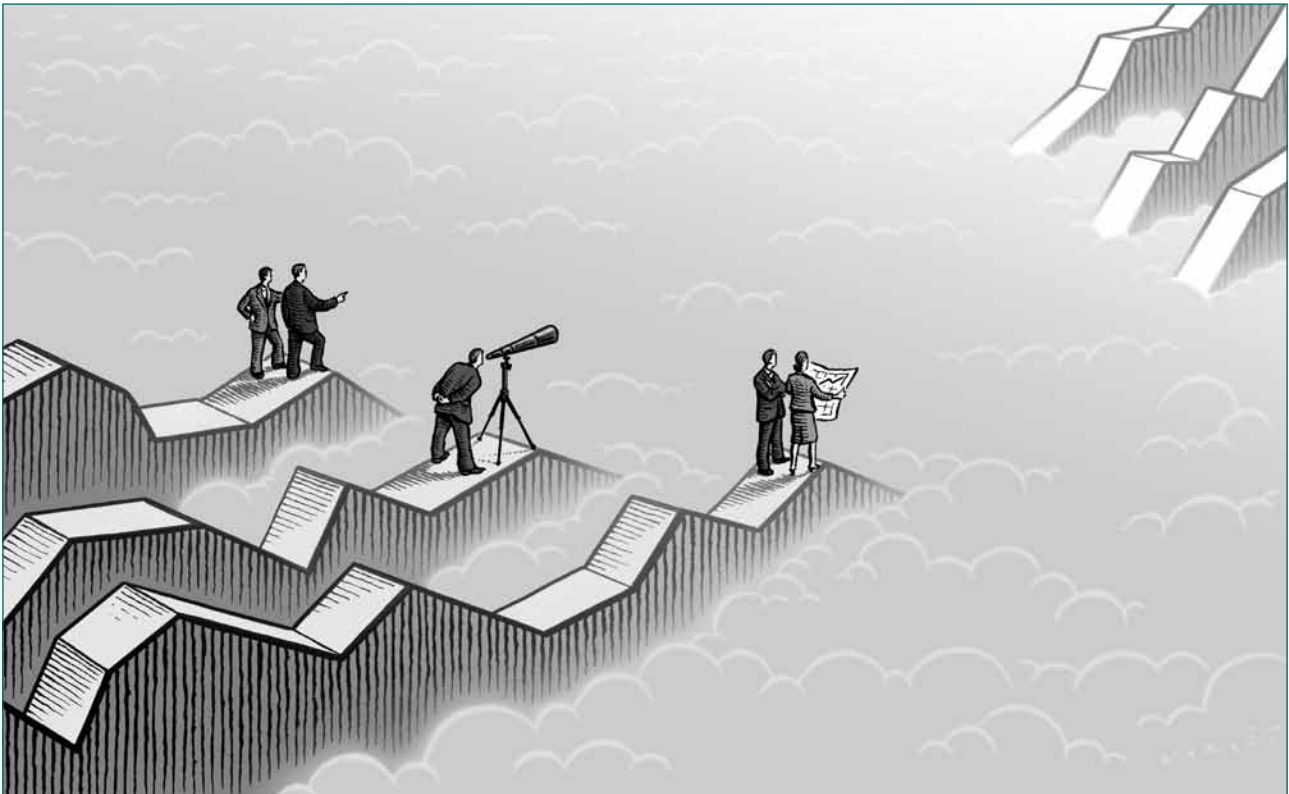


LNG Business Review

Global perspectives for LNG management

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LNG Business Review goes beyond straight news reporting to effectively address and provide a global perspective on the issues facing LNG management today and in the future. From resources, projects, technical and commercial developments, prices, supply/demand and market trends – the entire LNG value chain is represented in *LNG Business Review*.

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Letter from the Editor

Despite natural gas prices coming under heavy pressure from reduced demand during the recession, the rise of unconventional gas in the US, and a wave of new LNG, the top three energy super-majors – ExxonMobil, Shell and BP – have recently made clear that developing new LNG capacity remains at the core of their strategies. **LNG Business Review** looks at what they are planning, and why.

Other features in this issue include:

- South East Asia has traditionally been an LNG exporting region. Now that is all about to change with the addition of new terminals in Thailand and Singapore as well as Indonesia and Malaysia. **LNG Business Review** looks at the rapidly changing LNG landscape in the region.
- International law firm **CMS Cameron McKenna LLP** gives its view on the challenge of drafting provisions to revise price formulae when negotiating new long-term LNG SPAs into a European market becoming increasingly liberalised.
- Natural gas is expected to gradually take a greater share of Greece's energy mix with LNG potentially playing a key role. **LNG Business Review** looks at the prospects for LNG growth in Greece.
- As always **LNG Business Review** updates you on the latest news and progress on LNG projects across the globe, drawing on the experience and insight of our experts.

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Please contact me if you have any comments or thoughts on the features from our latest issue. Your feedback is always welcome.

Regards,

Jason O'Connell
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European LNG: Price reviews and long-term uncertainties

Ben Holland, partner and Jeremy X. Wilson, senior associate of the energy disputes group at the international law firm, CMS Cameron McKenna LLP give their take on the challenge of drafting provisions to revise price formulae when negotiating new long-term LNG SPAs into a European market becoming increasingly liberalised.

The current paradox

The growing influx of LNG deliveries to continental Europe accompanies the European Union's vision of, in the words of Neelie Kroes (former European Commissioner for Competition Policy), a "single, competitive functioning European energy market". This goal, however, has yet to be achieved and national gas markets still remain at various stages of liberalisation. After more than twelve years since the promulgation of the first Gas Directive (Directive 98/30/CE), Europe is still transitioning from markets with former monopoly/monopsony incumbents to a system involving competitive markets and many suppliers from around the world.

Buyers and sellers negotiating long-term LNG SPAs continue to face uncertainty as to how Europe's gas market(s) will evolve over the coming years. Questions remain as to how and when national gas markets may interrelate in the future, which developments may affect the market value of gas and where the volumes will be marketed, or in what way. With these uncertainties, parties to new long-term SPAs will need to reconsider the ongoing usefulness of the "classical" price formula model and the content and commercial effect of any price review (or "re-opener") clauses that are included in future agreements as Europe and other parts of the world move towards regional and global gas market integration.

The importance of price review clauses to the European long-term LNG market

Price review provisions in long-term LNG SPAs have historically been drafted to empower the parties (or eventually a third party, ie, an arbitral tribunal) to deal with changes in a *particular* market. These included changes in market segmentation (for example, the increased use of a particular fuel-oil in the industrial segment) or the entry of a new competing energy source. These developments could change the value of gas in the market where it was being sold and thus alter the competitiveness of the LNG price. Parties included price review provisions that, for example, might permit buyers and sellers to compare the circumstances at the beginning of a defined period to the circumstances at the end of the period, and adjust the historical weightings of market segmentation or other elements of the price formula. For example, a long-term LNG SPA to a market in continental Europe could include a price formula based on an analysis of the alternative fuels in that market, whereas a long-term SPA to the UK could use UK spot market gas prices instead. A long-term LNG supplier selling to a Continental European gas market may now have to consider certain European spot market gas prices in its price formula as arbitrage deals in cross-border trades increase.

In the last ten years, the evolution of Europe's energy markets has accelerated. For example, energy markets across Europe (to varying degrees) have experienced steady increases in the number of CCGT power plants coming on-line, coupled with the growth of new energy-

sources such as renewables. Environmental regulations have increasingly limited the use of oil-based fuels (such as HSFO and gas-oil) which historically competed with gas. The pricing of these newer sources of energy bears no relation to the price of oil or oil products; they have low variable costs and, other than nuclear, are weather dependent. These developments have changed gas consumption segmentation in the relevant markets. One reaction to this has been that some long-term LNG SPAs have evolved by adding new indexations (for example, introducing electricity indexation) to what can often be already highly complicated existing indexation (or “escalation”) components, creating a more diversified price formula.

Today, however, the pricing mechanisms and the price review clauses in traditional long-term LNG SPAs are coming under an additional strain. The on-set of gas-to-gas competition and much higher cross-border integration is making it more difficult for buyers and sellers of LNG to assess the market value of gas when considering how the price formula has evolved, and to identify what criteria will be relevant in future price reviews.

Classical pricing models have proved effective in a system of independent national markets, but are not well designed to work in a regime of interconnected markets, where significant pricing differentials can exist, and where some markets have a deeply traded and liquid spot market and others do not. While pricing provisions in long-term LNG SPAs have historically been able successfully to adapt to the developments across Europe, buyers and sellers today negotiate in a market where, with the onset of liberalisation, the transition in Europe is now a structural one.

Price review clauses in the current European market

The importance of carefully drafted price review clauses has been emphasised by the increasing number of renegotiations and arbitrations over the last few years as parties have triggered these provisions. One approach to address the current uncertainty about the eventual impact of liberalisation on European gas markets is to agree a price formula and price review structure allowing one of the parties a steady margin (absolute or percentage), also referred to as a “netback” price formula. A number of netback price structures exist. Netback price structures tend to be associated with price review provisions that provide a high degree of guidance as to how market value and evolution in market value is to be measured. With this comes a higher degree of certainty as to when the price formula may be revised in the future. There may also be a more certain “target” as to precisely how the price formula is to be revised.

An alternative approach is to agree a price review clause that is broad in character. The aim is to ensure that the language of the clause is wide enough for all possible sources of developments to be taken into account, in order to provide a price review clause that can adapt to the structural changes occurring in Europe’s energy markets. These clauses tend to provide a low degree of guidance as to how market value and evolution in market value is to be measured. As a consequence of the broad language used, it is not possible for such clauses to set out any methodology for establishing a price formula adjustment. With this comes greater uncertainty as to when and how the price formula may be revised in the future. With only broad guidelines, and without any certain “target” as to precisely how the price formula is to be revised, negotiations between the parties as to both whether and how a complicated price formula is to be revised are more challenging. This is even more problematic once arbitrators are involved, when both parties might approach the

price revision from opposite positions. Arbitral tribunals (who are typically chosen for their legal acumen rather than their technical expertise in gas pricing) are unlikely to bring any guidance or specific learning of their own as to how to revise a complicated price formula to reflect changes in the gas market.

Other approaches lie somewhere between price review clauses associated with netback price structures (providing a high degree of guidance as to how market value and evolution in market value is to be measured) and broad price review provisions (providing a low degree of guidance). The considerable difficulty in drafting precise price review parameters and the risk that these parameters may leave a market change without remedy are no doubt two of the reasons why broad price revision parameters have historically been commonly agreed. But experience over the last few years, and in particular the increase in frequency of contentious price reviews being resolved by arbitration, suggests that the temptation to automatically include only a very broad “methodology” (or parameters) within price review clauses should be resisted. Despite the fact that these provisions are adaptable to Europe’s liberalising national gas markets, parties should consider specifying in more detail the parameters of any future price review.

The solution agreed by the parties will depend upon the parties themselves and their underlying commercial drivers, the duration of the contract, the flexibility and associated terms of the contract, the market into which the buyer will on-sell the LNG in the early years of the contract, and each party’s views as to the evolution of both the buyer’s selling pattern and the future characteristics of the relevant market or markets. Because these considerations will vary considerably, parties should always refrain from applying any type of “boilerplate” price review clause. Proposing potential parameters and specific mechanisms and criteria that should be applied in any price adjustment on a “one-size-fits-all” basis is impossible.

However, some assistance can be derived from consideration of how historic price review provisions have been applied in recent years, and how these might be expected to react to uncertainty about the eventual impact of liberalisation on European gas markets. All of the following examples, to some extent or other, provide guidance as to how any revised price formula should be derived, to which can be added the comments earlier about the pros and cons of both netback pricing/price review structures and more broad provisions.

PARAMETERS ON THE AMOUNT BY WHICH THE LNG PRICE MAY BE ALTERED IN ANY SINGLE PRICE REVIEW	
How	Fix a range, in percentage or in absolute terms, by which the LNG price could go up or down.
Pros	<p>Attractive to sellers that have project financing obligations that require them to demonstrate, to some extent or other, a secured revenue stream over at least the early years of the LNG SPA. Some buyers may also prefer certainty as to the future LNG costs.</p> <p>If the parties fail to agree changes to the price formula, the third-party arbitrators have a clear field of reference within which to set a new price formula. Some buyers may also prefer certainty as to the future LNG costs</p>
Cons	<p>Given the uncertainty in the timing and nature of eventual liberalisation, even upon a successful review, the LNG price might not keep pace with market. (A partial answer might be to allow for a follow-on price review so that a further incremental adjustment to the LNG price might follow at a subsequent price review. However, the LNG price would still – in effect – be anchored to some extent by the price originally agreed by the parties.)</p> <p>Whilst the outcome of the price review has greater certainty, there is no guidance as to how, within the agreed range, to reset the price, nor how evolution(s) in market value are to be measured, and what specific mechanisms and criteria should be applied.</p>

DELINEATING WHICH INDIVIDUAL ELEMENTS OF THE PRICE FORMULA MAY BE ADJUSTED	
How	<p>The parties might agree to allow future changes in the fixed component (otherwise known as the “constant” or “base price”), or to the slope (or pass-through factor) but not to both.</p> <p>Parties that have agreed a price formula containing an “S” curve might decide to limit the price review to a review of the “inflection points” and nothing else.</p>
Pros	<p>By limiting the elements of the price formula that may be revised, it may be easier for the parties to reach a commercial resolution, as it is often easier to achieve consensus if there is only one agenda item. This can be important, because failure of the parties to agree will increase the risk of third-party intervention through arbitration.</p>
Cons	<p>Any limitation upon which elements of the price formula are subject to review may prevent any revised price formula evolving to reflect market changes.</p>
CONNECTING ANY PRICE REVIEW TO COMPARABLE LNG SPAS WITHIN THE RELEVANT MARKET	
How	<p>Where either party considers that the LNG price fails to reflect the price being paid for LNG under arms-length transactions comparable to the LNG SPA under review, the price can be updated according to comparable transactions.</p> <p>It will be important to set out what markets can be considered, and over what time period it is permissible to find comparable contracts.</p>
Pros	<p>If comparator data is available, then including clear guidance on how to revise the price formula arguably makes the price revision mechanism more certain and “scientific”, with potential time and cost savings, due to the narrower scope of the process and the fact that the parties retain more control.</p> <p>It provides for gas-to-gas contract competition, which will continue to develop as liberalisation enters into its final stages.</p>
Cons	<p>It is very uncertain whether enough non-confidential data will be available to show that comparable contracts exist, given the highly sensitive nature of LNG contracts.</p> <p>Even if price data is publicly available it may not be possible to show if these other contacts are comparable, in terms of volumes, flexibility and many other factors. It may also not be possible to show that the comparator contract was agreed within the relevant time period.</p> <p>Difficulty in defining the buyer’s market as the market where the buyer sells gas may change unpredictably as liberalisation takes effect.</p>
PREVENTING THE “REWRITING” OF THE ORIGINAL PRICE FORMULA	
How	<p>An important question grappled by arbitrators in any price review is whether the price formula may be “rewritten”, or only “revised” based (to some extent or other) on the original bargain signed by the parties at the start of the LNG SPA.</p> <p>If only a “revised” price formula is sought, the price review provision sets out guidance how to decide whether the price formula needs to be revised, what standard should be applied to this test, and how the changes in the market are to be translated into changes to the price formula.</p>
Pros	<p>Such language would have prevented the arbitrators from rewriting the price formula, as was done in the <i>Gas Natural Aproveisionamientos SDG SA v Atlantic LNG Company of Trinidad and Tobago</i>, where the United States District Court for the Southern District of New York held that the arbitrators, in imposing effectively a complete rewriting of the original price formula, did not exceed their authority.</p> <p>This was because the LNG SPA did not “set a structural limitation on permissible price revisions”, and the price review clause only required the arbitration to reach a “fair and equitable revision” of the LNG price. The effect on the parties was that the arbitrators were allowed to effectively rewrite the price formula, providing a price that neither the buyer nor the seller desires.</p>
Cons	<p>Any “structural limitation” on the scope of the price formula may prevent any revised price formula evolving to reflect market changes.</p>

PARAMETERS THAT INCLUDE DEVELOPMENTS ARISING FROM FULL LIBERALISATION	
How	We have seen a long-term GSA price-review clause that instructs the parties (or the tribunal) to take into account changes in the European gas market for long-term contracts as well as changes in the international energy markets.
Pros	The drafters of the clause anticipated full cross-border integration where a united market for long-term contracts existed. The clause catered for the eventuality of gas-to-gas competition across the European gas market.
	This approach guides the arbitrators to consider future liberalisation and in doing so predicts likely developments over the next 10 – 20 years.
Cons	At the time of the price review, due to delays in liberalisation, the particular gas market where the gas was sold may still be relatively isolated, so that developments in neighbouring gas markets have no relevance to that market. The price review mechanism would introduce criteria, which had no relevance. (One possible solution is to offer the parties (and a tribunal) a list of possible developments that may be considered in a price review, but allow those developments to be considered only if they are relevant. This criterion of relevance would prevent parties pointing to irrelevant developments and data.)

As Europe's gas markets continue to undergo liberalisation, parties negotiating long-term SPAs must address the issue of what parameters the price review clause will provide to the parties (or arbitrators) in future price reviews. What guidance as to how market value and evolution in market value is to be measured, and what specific mechanisms and criteria should be applied in any price adjustment is a challenging question. It is, and will continue to be, the subject of considerable internal debate and analysis. Yet it has the potential to be a billion dollar question to parties negotiating long-term LNG SPAs into Europe. This is because the answer to this question will determine how much control the parties retain over the price under their contract, and how much is ultimately determined by third-party arbitrators. **LBR**