GAR

GUIDE TO ENERGY ARBITRATIONS

FIFTH EDITION

General Editor J William Rowley QC

Editors

Doak Bishop and Gordon E Kaiser

The Guide to Energy Arbitrations

Fifth Edition

General EditorJ William Rowley QC

EditorsDoak Bishop and Gordon E Kaiser

Reproduced with permission from Law Business Research Ltd This article was first published in July 2022 For further information please contact insight@globalarbitrationreview.com

Published in the United Kingdom by Law Business Research Ltd, London Meridian House, 34-35 Farringdon Street, London EC4A 4HL, UK © 2022 Law Business Research Ltd www.globalarbitrationreview.com

No photocopying: copyright licences do not apply.

The information provided in this publication is general and may not apply in a specific situation, nor does it necessarily represent the views of authors' firms or their clients. Legal advice should always be sought before taking any legal action based on the information provided. The publishers accept no responsibility for any acts or omissions contained herein. Although the information provided is accurate as of July 2022, be advised that this is a developing area.

Enquiries concerning reproduction should be sent to: insight@globalinvestigationsreview.com. Enquiries concerning editorial content should be directed to the Publisher – david. samuels@lbresearch.com

ISBN 978-1-83862-878-9

Printed in Great Britain by Encompass Print Solutions, Derbyshire Tel: 0844 2480 112

Acknowledgements

The publisher acknowledges and thanks the following for their learned assistance throughout the preparation of this book:

Bennett Jones LLP

Dentons

Doug Jones AO

Edison SpA

Energy Law Chambers

Haynes and Boone CDG LLP

K&L Gates LLP

King & Spalding

Squire Patton Boggs

Twenty Essex

Publisher's Note

Global Arbitration Review is delighted to publish *The Guide to Energy Arbitrations*.

For those unfamiliar with GAR, we are the online home for international arbitration specialists, telling them all they need to know about everything that matters.

Most know us for our daily news and analysis service, but we also provide much, much more – technical books and reviews, conferences and handy workflow tools, to name just a few, that go into more depth than the exigencies of journalism allow. (Do visit us at www.globalarbitrationreview.com to see our full range of output.)

The Guide to Energy Arbitrations, fifth edition, is one such volume.

Because GAR is so central to the international arbitration community, we regularly become aware of gaps in the literature. *The Guide to Energy Arbitrations* was the first example of identifying such a gap and we are delighted at the successful way in which it has been filled, with the help of so many leading firms and individuals, and the enduring appeal of this Guide.

If you find it useful, you may also like the other books in the GAR Guides series. They cover construction, mining, post-M&A disputes, IP, advocacy, damages, and the challenge and enforcement of awards in the same practical way. We also have a citation manual – UCIA (*Universal Citation in International Arbitration*).

On behalf of the whole GAR team, I'd like to thank our editors – Bill Rowley, Doak Bishop and Gordon Kaiser – for the energy they've put into the project, and my colleagues in production for the elan with which they've realised our collective idea.

David Samuels

July 2022 London

Contents

Prefacexi J William Rowley QC Twenty Essex	
1	The Breadth and Complexity of the International Energy Industry1 Doak Bishop, Eldy Quintanilla Roché and Sara McBrearty King & Spalding
PART I: INVESTOR-STATE DISPUTES IN THE ENERGY SECTOR	
2	Taxation-Related ISDS
PART II: COMMERCIAL DISPUTES IN THE ENERGY SECTOR	
3	Construction Arbitrations Involving Energy Facilities
4	Offshore Vessel Construction Disputes
5	Disputes Involving Regulated Utilities

6	NAFTA and USMCA Energy Arbitrations	
7	LNG Arbitrations	
PART III: CONTRACTUAL TERMS		
8	The Evolution of Natural Gas Price Review Arbitrations	
9	Gas Price Review Arbitrations	
PA	ART IV: PROCEDURAL ISSUES IN ENERGY ARBITRATIONS	
10	Five Years Later: Update on Multi-Tier Dispute Resolution Clauses as Jurisdictional Conditions Precedent to Arbitration 243 Vasilis F L Pappas and Artem N Barsukov Bennett Jones LLP	
11	Conclusion: The Challenges Going Forward	
	out the Authors285 ntributing Law Firms' Contact Details295	

Preface

Economic liberalisation and technological change in the past several decades have altered the global economy profoundly. Businesses, and particularly those involved in the energy sector, have responded to reduced trade barriers and advancement of technology through international expansion, cross-border investments, partnerships and joint ventures of every description.

The move to today's 'internationality' of business and trade patterns alone would have been sufficient to jet-propel the growth of international arbitration. But when coupled with the uncertainties and distrust of 'foreign' court systems and procedures, the stage was set for a move to processes and institutions more suited to the resolution of a new world of transborder disputes.

Not surprisingly, the concept and number of international commercial arbitrations have grown enormously during the past 25 years. Bolstered by the advantages of party autonomy (particularly over access to a neutral forum and the ability to choose expert arbitrators), confidentiality, relative speed and cost-effectiveness, as well as near worldwide enforceability of awards, the system is flourishing. And if a single industry sector can lay claim to parental responsibility for the present universality of international arbitration as the go-to choice for the resolution of commercial and investor-state disputes, it must be the energy business. It is the poster boy of arbitral globalisation.

Led by oil and gas, the energy sector is marked by enormously complex, capital-intensive international deals and projects, frequently involving prominent parties and state interests. Transactions and partnerships are often long-term and involve 'foreign' places and players. Political instability and different cultural backgrounds characterise many of the sector's investments. In short, the energy sector is a natural incubator for disputes best suited to resolution through international arbitrations. And despite recent international trade disputes, Russia's invasion of Ukraine and the appearance in 2019 of the novel coronavirus, all of which have

lead to a degree of restructuring of cross-border investments and supply chains, there is no sign that this will diminish the popularity of (and need for) international arbitration.

Indeed, in the past 50 years or so, following a rash of nationalisations in North Africa, the Gulf States and parts of Latin America, and the lessons learned in 'foreign courts', there is scarcely a major energy sector contract (whether oil, gas, electric, nuclear, wind or solar) that does not call for disputes to be resolved before an independent and neutral arbitral tribunal, seated, where possible, in a neutral, arbitration-friendly place.

The experience and statistics of the major arbitral institutions bear out the claim that the energy sector has driven, and continues to account for, major growth in international arbitration. ICSID is illustrative, where 42 per cent of its caseload in 2019 involved the energy sector. At the LCIA, case statistics for 2019 revealed that the energy and resources sector had the highest number of parties, both as claimants and respondents. Between 2014 and 2015, the Stockholm Chamber of Commerce Arbitration Institute saw a 100 per cent increase in the number of its energy-related cases.

Although much of the evidence of the energy sector's arbitral demand is anecdotal, those arbitrators who are known in the field report growing demand and a steady increase in enquiries as to availability. And having regard to the multifaceted fallout from the oil price crash of earlier this year, a revival of resource nationalism (which exacerbates the natural tension between energy investors and host states), an ongoing war in Ukraine and a world in which sanctions, as well as the still present covid-19 pandemic, imperil contractual performance, the only realistic expectation is for further reliance on arbitrators and arbitral institutions coping with the disputes that are surfacing daily.

Another driver towards arbitration of energy disputes is the fact that the number of substantive players in the sector is relatively limited. These parties will invariably have multiple agreements, partnerships and joint ventures with each other at the same time, many of which are long-term. These dynamics call for disputes to be resolved by decision makers who are known to and trusted by all, and whose decisions are final. The simple fact about business is that the economic uncertainty associated with an unresolved dispute overhanging a long-term partnership is often considered to be more problematic than getting to its quick and definitive resolution, even if the resolution is unfavourable in the context of the particular deal.

Against this backdrop, when Gordon Kaiser raised the question with me in the summer of 2014 of producing a book that gathered together the thinking and recent experiences of some of the leading counsel in the sector, it resonated immediately. Gordon was also more than pleased when I suggested that we might try to interest Doak Bishop as a partner in the project. With Doak's acceptance of the challenge, we have tried, in the first four editions of this guide, to produce coherent and comprehensive coverage of many of the most obvious, recurring or new issues that are now faced by those who do business in the energy sector and by their legal and expert advisers.

Before agreeing to take on the role of general editor and devoting serious time to the project, we needed to find a publisher. Because of my long-standing relationship with Law Business Research (LBR), the publisher of Global Arbitration Review (GAR), we decided that I should discuss the concept and structure of our proposed work with David Samuels, GAR's publisher, and Richard Davey, then managing director of LBR. To our delight, the shared view was that the work could prove to be a valuable addition to the resource material available. On the assumption that we could persuade a sufficient number of those we had provisionally identified as potential contributors, the project was under way.

Having taken on the task, my aim as general editor has been to achieve a substantive quality consistent with *The Guide to Energy Arbitrations* being seen as an essential desktop reference work in our field. To ensure the high quality of the content, I agreed to go forward only if we could attract as contributors colleagues who were some of the internationally recognised leaders in the field. The guide is now in its fifth edition, and Doak, Gordon and I feel blessed to have been able to enlist the support of such an extraordinarily capable list of contributors over the years.

The fifth edition of *The Guide to Energy Arbitrations* has been expanded with a new chapter on LNG arbitrations. The remaining chapters have all been updated to reflect developments since 2018.

In future editions, we hope to fill in important omissions, such as the changing dynamics of investment cases under the Energy Charter Treaty, including the consequences of the *Achmea* decision of the European Court of Justice; injunctions against and the setting aside of awards; bribery and corruption; sovereign immunity and enforcement issues; *force majeure* and contractual allocations; issues arising related to sanctions; and intellectual property and insurance disputes in the energy sector.

Without the tireless efforts of the GAR/LBR team, this work not would have been completed within the very tight schedule we allowed ourselves. David Samuels and I are greatly indebted to them. Finally, I am enormously grateful to Doris Hutton Smith (my long-suffering PA), who has managed endless correspondence with our contributors with skill, grace and patience.

I hope all my friends and colleagues who have helped with this project have saved us from error – but it is I alone who should be charged with the responsibility for such errors as may appear.

Although it should go without saying, this fifth edition will obviously benefit from the thoughts and suggestions of our readers, for which we will be extremely grateful, on how we might be able to improve the next edition.

J William Rowley QC

July 2022 London

Part III

Contractual Terms

CHAPTER 8

The Evolution of Natural Gas Price Review Arbitrations

Stephen P Anway, George M von Mehren, Michelle Glassman Bock and Max Rockall¹

Price review arbitrations are, as a collection of cases, the highest-value commercial disputes in the world today. The amounts at stake begin in the hundreds of millions of dollars and often climb into the billions. Yet despite the staggering amounts that hang in the balance, price review arbitration has only recently emerged from relative obscurity to become a subject of debate in the wider energy arbitration arena.

The authors of this chapter have been involved in price review arbitrations since their inception. During this time, the field has evolved in exciting and unexpected ways. This chapter seeks to map that evolution by providing an overview of the past, the present and the future of price review arbitration.

As the chapter makes clear, the twists and turns in the evolution of price review arbitrations have generally not been driven by changes in contractual provisions, legal rights or the acts or omissions of the parties involved. Rather, it has been external events – such as the liberalisation of national gas markets, the global economic crisis and the maturation of certain gas hubs – that have paved the evolutionary path.

Stephen P Anway, George M von Mehren and Michelle Glassman Bock are partners at Squire Patton Boggs (US) LLP and Max Rockall is a partner at Squire Patton Boggs (UK) LLP. The authors thank Douglas Pilawa, associate at Squire Patton Boggs, for his assistance with this edition of the chapter.

Parties to long-term gas supply contracts have therefore been forced to react – availing themselves of the 'price review' provisions in long-term contracts to recalibrate their price formulas to reflect changed market conditions. The margin for error, however, is razor thin. Changing just a few cents per unit of gas can shift hundreds of millions of dollars between the parties because of the very substantial volumes delivered during the life of a long-term gas contract.

Arbitrators deciding these disputes, therefore, have a weighty and difficult task. Price revision provisions imbue the arbitrators with exceedingly broad authority to modify the pricing formula with strangely little direction on how to do so. Yet despite this awesome power and frequent lack of direction, arbitrators have done a laudable job – by and large – of getting it right.

As discussed below, the story of natural gas price reviews has been, until recently, largely a European one. Although this chapter starts at the beginning of that story, it is by looking back that we see the positive and important role of international arbitration in the development of gas pricing during the past 20 years or so in Europe. And it is by reflecting on the past that we are able to identify developing trends and make predictions for the future.

These trends and predictions are particularly important for Asia, where the gas markets today largely resemble those in Europe two decades ago: markets in transition, where pricing is still largely tied to oil products, and where the disputes are now progressing, for the first time, to international arbitration. Earlier editions of this chapter predicted that, just as price review arbitrations emerged in Europe to address changes in the gas markets not reflected in contract prices, Asia would soon experience its first wave of price review arbitrations. As this chapter explains, those predictions, while slow to be realised, have now proven true.

The historical dramatis personæ

The parties to price review arbitrations tend to be repeat players. Historically in Europe, sellers are typically the producers of natural gas and entities that are government-owned, or formerly government-owned, with strong state participation. For example, there are only a handful of producers around the world who regularly sell to the continental European markets: Gazprom (Russia), Sonatrach (Algeria), Qatargas (Qatar), Nigeria LNG (Nigeria), Equinor (formerly Statoil) (Norway) and Atlantic LNG (Trinidad and Tobago).

Buyers, by contrast, are often formerly state-owned companies in countries that do not produce significant gas domestically, but have the infrastructure to accept delivery of gas, transport it through an existing transmission network and distribute it to wholesalers or end-user consumers in the downstream market. Before the liberalisation of the European gas markets, these companies were

predominantly state-owned monopolists.² When the European gas markets were liberalised during the 2000s, competitors entered these markets and the list of buyers grew. Edison in Italy, for example, was not a market incumbent but has become a major buyer in the liberalised Italian market.

These, then, were historically the usual parties to gas price review arbitrations. They signed with each other a very particular type of contract: a long-term, take-or-pay contract for pipeline gas or liquefied natural gas (LNG). And it is in this type of contract that the price review clause is typically found.

The price review clause

The history of the price review clause can be traced back to the early days of the North Sea gas industry. The upstream suppliers – the sellers under long-term contracts – often needed financing for the investment necessary to bring the gas to commercial production. To ensure that the producers would be able to repay the money borrowed, the sources of financing required the producers to obtain a guaranteed, long-term revenue stream from downstream buyers.

Producers did so by signing long-term, take-or-pay contracts with buyers, which obliges buyers to pay for a predetermined volume of natural gas, whether or not the buyers actually take that volume. This volume commitment – often worth tens of billions of dollars over the life of the contract – gives the sellers the guaranteed revenue stream, providing long-term cash flow to support the project economics even at a relatively low contract price.

Buyers were willing to undertake the volume commitment, but they needed to be assured that the price paid to the sellers would remain viable in the long term – even as changes in market conditions affect the price that they can obtain when on-selling downstream in the end-user markets.

The problem is simple: if, for example, the price that the buyer is paying upstream to the supplier is more than the price that the buyer can receive downstream from the end users, then a price decrease is required because otherwise there is no margin, there are losses and the buyer will quickly go out of business. Conversely, if the price that the buyer is paying upstream to the supplier is too low relative to the price that the buyer can receive downstream from end users, the seller may not be enjoying the benefit of its bargain.

² Examples of former state-owned monopolists include Eni in Italy, Enagas in Spain and Geoplin in Slovenia.

The parties, therefore, must reach a balance. That balance is achieved when the contract price is defined by reference to the price that end users pay for natural gas in the market where the gas is delivered. The objective is that the contract price the buyers pay to the sellers will self-adjust, according to a formula, as end-user prices evolve over time.

And here is the crux of the issue: how do sellers and buyers arrive at a contract price formula – one that will govern for decades to come – such that it will adequately track the changing value of gas in the end-user market? The answer, in general terms, is through a netback formula.

A netback formula references a reliable natural gas price marker (such as a hub price, a reliable published price or a portfolio evaluation) and then deducts certain costs and allows for a margin. For example, gas sold to the US gas market has been sold at a price tied to US traded gas prices – such as Henry Hub – thereby ensuring that the price remains aligned with the conditions under which the gas can be sold into the downstream market.

Historically, however, this option was not available in many gas markets. When European and Asian importers began contracting for natural gas supplies, there were no developed natural gas markets in their countries. The importers – the buyers (typically government-owned monopolists) – were creating demand downstream by importing gas and selling it to consumers in competition not with other natural gas (because they were the monopolist gas companies and there was no gas-to-gas competition) but, rather, with other competing fuel products – primarily oil products and coal.

To gain market share, therefore, gas needed to be priced at a discount to those competing fuels. Prices for gas were commonly defined by the government on the basis of supply costs – that is, the price that the buyers paid the sellers under long-term contracts. As a result, there was no independent gas price reference in the destination market. When the buyer and the seller were at the negotiation table discussing what price the buyer would pay to the seller during the life of the contract, they could not simply put into the price formula a gas price reference; there was none. Instead, they often included a reference to the price of competing oil products. In this monopolist market, displacement of oil and other competing fuels would allow the monopolist to sell the gas downstream.

In short, pricing by reference to these competing fuels was the best option to track the competitive dynamics of the downstream natural gas market. Oil and oil-derived products served as a proxy for the 'value' of natural gas.

To establish this proxy pricing, buyers and sellers often agreed to a contract price with two fundamental components: first, a fixed base value referred to as 'P₀'; and second, an indexation component tied to the evolution of oil-derived

products. This latter component, called an escalator clause, is a multiplier to the base value that allows the contract price to fluctuate during the term of the contract in accordance with the price movement of the oil products.

Proxies, however, are necessarily imperfect. Commodity markets do not remain static, and there will be changes in the gas market that will not be reflected in, and therefore not captured by, the imperfect oil proxy in the price formula.

Thus was born the price review clause. It allows either party to seek revision of the contract price if the conditions underlying the commercial bargain significantly change over time. This is the fundamental trade-off between the take-or-pay commitment of the buyer and the right to realign the contract price periodically to conditions in the destination market.

Although the terms of specific price review clauses differ, they often (but do not always):

- specify the intervals at which regular price reviews can be initiated at the request of either party on specified dates;
- specify a certain number of 'wildcard' price reviews, which can be initiated by either party at any time;
- require that a price review be initiated by filing a price review notice with the other party;
- provide for a mandatory negotiation period (usually three, four or six months);
- impose certain requirements that must be satisfied before the price formula can be modified, often a significant change in a specified market that has occurred since the current price formula last became effective and that:
 - affects the value of natural gas;
 - is non-temporary in nature; and
 - requires an adjustment to the contract price (i.e., the economic effect of the change is not already reflected in the current price formula);
- if these preconditions are satisfied, specify that the price formula should be revised in accordance with certain requirements, namely, the revision:
 - should take into account the economic effect of the changes that gave rise to the price review;
 - must allow the gas to be sold competitively in the market, at a reasonable marketing margin, or such that the buyer may market the gas economically in its end-user market; and
 - should assume sound marketing and efficient management by the buyer;
- specify that the revision is retroactive to the date of the price review notice;
- specify that the parties must calculate the difference between the revision and the former price (already paid by the buyer) for that period;

- if the revision results in a price reduction, provide that the seller owes the difference to the buyer for that period;
- if the revision results in a price increase, provide that the buyer owes the difference to the seller for that period; and
- if the parties cannot reach agreement within the mandatory negotiation period, provide that either party may submit the matter to international arbitration.

Contracts that include price review clauses typically include arbitration provisions of the International Chamber of Commerce, the Arbitration Institute of the Stockholm Chamber of Commerce, the London Court of International Arbitration, the Singapore International Arbitration Centre or the United Nations Commission on International Trade Law, and provide for three arbitrators. The seat of arbitration is often New York, London, Geneva, Paris, Stockholm or Singapore. Arbitral awards revising a contract price or rejecting a request for revision are enforceable under the Convention on the Recognition and Enforcement of Foreign Arbitral Awards (the New York Convention) – although enforcement is rarely required because of the parties' ongoing commercial relationship.³

These price review clauses started to become standardised in the 1980s, when contracts were signed concerning the Norwegian Troll gas field. These 'Troll contracts' were organised through a centralised process, by which all producers (and the Norwegian government) and all buyers (which operated through a consortium) were involved in the negotiations. As a result, a standardised agreement was used, which included the price review language. In the decade that followed, other buyers and sellers adopted the same or similar language in other long-term supply contracts, and the price review clause became more or less an industry standard in Europe.

These price review clauses – now in place in long-term gas contracts across Europe – set the stage for what happened next.

The first wave of price reviews

On 22 June 1998, the European Commission – following years of preparation – promulgated Directive 98/30/EC relating to the liberalisation and deregulation of the natural gas markets of EU Member States. The Directive sought to encourage competition in the then largely monopolistic European gas markets. It

³ One notable exception is *Gas Natural Aprovisionamientos, SDG, S.A. v. Atlantiz LNG Company of Trinidad and Tobago* [2008 WL 4344525 S.D.N.Y.], in which the authors successfully represented the enforcing party.

sought to do so by (1) allowing third parties open access to natural gas transmission facilities and (2) permitting consumers to choose their natural gas supplier and to negotiate prices. The European Commission stated that the liberalisation of the European natural gas markets would lead to increased competition and that, '[a]s competition increases with the progressive development of the internal market for gas, prices are expected to fall'.⁴

In the years that followed, EU Member States took a variety of measures in their national legal orders to implement the Directive. In many countries, the national legislation sought to achieve 'unbundling' (the process of functionally segregating gas marketers from operators of gas delivery and storage facilities), which enabled competition by giving competitors non-discriminatory access to the gas system. Liberalisation proceeded at a different pace in each Member State.

Change was afoot. The liberalisation efforts started to move the EU gas markets from a system with only one monopolistic buyer in each country selling downstream, to a system in which numerous competitors participated in the market, signed contracts with suppliers such as Gazprom and Sonatrach, and competed with other buyers to sell to the downstream market, underbidding each other to gain market share. The aim was that the downstream price paid by the end users would not be set by the supply price but, rather, by the competitive dynamics in the end-user market itself.

There also was another, more subtle change. Whereas buyers had previously sold gas downstream in competition with oil-based fuel products, they were now selling the same gas downstream in competition with other natural gas suppliers (i.e., gas-to-gas competition). This caused a problem for buyers. With the barriers to market entry crumbling, competitors could enter the market for the first time and offer prices at a discount to what the incumbent had been charging. At the same time, the prices that buyers were paying to sellers under the long-term contracts were still tied to oil prices that were agreed before gas-to-gas competition existed. This disconnect between what buyers were paying upstream and what buyers were receiving downstream created the archetypical situation that the price review provisions were intended to address.

Arbitration commenced. The authors represented the winning party in the first price review arbitration in the world. Filed in the early 2000s, the claim was that the liberalisation of the relevant European gas market broke up the importer's monopoly and, for the first time, created gas-to-gas competition when

⁴ European Commission, *Opening Up to Choice: Launching the Single European Gas Market*, Office for Official Publications of the European Communities, 2000, p. 17.

new competitors entered the market and began offering prices at a discount to the previously prevailing prices. We therefore sought the addition of a new component to the pricing formula to reflect the development of competition in the relevant gas market.

The tribunal agreed. It significantly lowered the contract price formula by introducing a correction factor, to correct for the decrease in the market gas price that the oil-linked contract price did not track. Importantly, however, the tribunal left the pricing formula tied to oil products because, at that time, there was still no true price signal in the relevant market that could reliably represent the price for natural gas. The tribunal, therefore, left the price formula tied to oil products but changed the price level to reflect gas-to-gas competition price in the market.

Other arbitrations followed, most resulting in significant price decreases for the buyer.

The second wave of price reviews

A second wave of price reviews began in the wake of what many described as a 'perfect storm' of price-depressing events that occurred from 2008 to 2010. Two events in particular converged to create this situation.

First, the global economic crisis caused gas demand to decline relative to projected growth and expanded import capacity, leaving gas companies under take-or-pay obligations to compete fiercely with each other in a desperate attempt to sell their oversupplied volumes.

Second, new and unexpected volumes flooded the European market through the US shale gas boom, which resulted in LNG destined for the US market being diverted to Europe. Based on higher prices in Europe and transportation limitations, companies – under take-or-pay obligations – began unloading volumes in Europe, which became a 'sink' market. This supply–demand imbalance led to a gas glut.

These market changes accelerated the development of gas hubs. The influx of new quantities of gas into Europe increased liquidity in the European natural gas hubs. And with the influx of gas being traded at these European hubs, the hubs began to mature rapidly.

Nevertheless, prices in many European markets still remained largely tied to oil products. As a result, most (although not all) of the price reviews in this second wave resulted in a decrease in the contract prices to reflect the reduced level of gas prices, but still left the prices tied to oil products.

This was no small event. The buyers that achieved downward revisions to their supply prices included Bulgargaz (Bulgaria), Centrex (Austria), Conef Energy (Romania), DONG (Denmark), EconGas (Austria), Edison (Italy), Eni (Italy),

E-On (Italy), Gas Natural (Spain), GasTerra (Netherlands), GDF Suez (France), PGNiG (Poland), RWE (Germany), Shell Energy (Netherlands), WIEH (Germany) and WINGAS (Germany).

Each of these buyers obtained price reductions in their long-term contracts based on the evolution of the European markets. The prices paid by end users were now no longer set by supply costs. Rather, the reverse had happened: the supply costs were set by the end-user prices through the price reviews.

The third wave of price reviews

Several years later, buyers argued that gas hubs had developed and matured in much of Europe to the point that they had significant traded volumes and transparent prices. This allowed several European hubs to act as a price-setting mechanism in the markets that they serve.

As a general principle, the more significant the volumes traded on a hub, the more liquid – and reliable and transparent – its price reference becomes. A 'liquid' price is one that is not easily influenced by a small number of trades because of the large overall volumes traded. An 'illiquid' hub, by contrast, is more prone to price volatility because of the ability of a small number of trades to influence the average price more quickly. The growth of liquidity at a trading hub also facilitates increasingly transparent prices because of the higher number of trades made at the hub.

The Title Transfer Facility (TTF) in the Netherlands became the most liquid continental European hub during this period. By 2009, traded volumes at the TTF had grown to the extent that the TTF was regarded as an open and liquid gas trading hub. Since 2012, the price formation mechanism for many gas contracts throughout Europe has been the TTF price.

Many buyers in this third wave of price reviews, therefore, asked for the proxy of oil products in the formulas to be replaced by gas hub indexation. It is a matter of public record that suppliers such as Equinor (Norway) and Gazprom (Russia) have increasingly agreed to include gas hub indexation or reflect gas hub price levels in their supply contracts. The two largest supply contracts into Europe – which are contracts that Eni and E-On have with Gazprom – were revised to

Jason Bordoff and Trevor Houser, 'American gas to the rescue? The impact of US LNG exports on European security and Russian foreign policy', Columbia SIPA, Center on Global Energy Policy (September 2014), p. 17.

include gas hub indexation⁶ (it is public information that the Eni contract is now 100 per cent hub-indexed).⁷ Further, nearly all of Equinor's contracts to northwest Europe have some level of hub indexation.⁸

The result of this third wave of price reviews was that, in many cases, parties and tribunals either partially or entirely replaced oil indexation with hub indexation in pricing formulas. Most Western European gas contracts are now partially or entirely hub-indexed.

New European pricing trends

As the foregoing shows, the evolutionary path of price review arbitration has been marked by three epochs. During this time, the European gas markets have experienced growing pains, and players in the field have struggled to cope with the evolving energy landscape. International arbitration has played an important part in that evolution.

Focus now turns to the future. Perhaps the most interesting question is whether price review arbitrations in Europe will continue or will slowly die out. As European hubs continue to mature, hub indexation will be increasingly substituted, through party agreement or arbitral awards, for the proxy of oil products. And that means that, as a general rule, the supply price formulas will better react in real time to natural gas prices in downstream markets, and capture market changes in a way that the oil prices could not – and the need for price reviews will be reduced. In other words, hub indexation will significantly diminish the need for the very mechanism that was an important part of the emergence of hub indexation in the first place: the price review clause.

In these circumstances, the question must be asked: is there still a reason to include a price review clause if the formula is wholly tied to a gas hub index? Those who say 'no' believe that hub indexation is the cure for everything – and that market prices will stay in alignment with contract prices that are tied exclusively to hub indexation. There is, however, a more nuanced view: price review

⁶ ibid., Table 2, p. 17.

⁷ ibid., Table 2, p. 17; 'UPDATE 2-Italy's Eni wins 1st non oil-indexed gas deal from Russia', Reuters (23 May 2014).

^{8 &#}x27;Statoil breaks oil-linked gas pricing', *Financial Times* (19 November 2013); Jonathan Stern, 'The Dynamics of a Liberalised European Gas Market – Key determinants of hub prices, and roles and risks of major players', The Oxford Institute for Energy Studies (December 2014), p. 12; Bordoff and Houser (op. cit. note 5, above), p. 16.

clauses are still important because there is no guarantee that hub pricing will reflect market prices – particularly if the destination market is different from the hub reference.

A simple hypothetical illustrates the point. Suppose companies contracting for the German market wish to include in the contract price a 100 per cent hub reference to the TTF in the Netherlands. They wish to do so because they believe the TTF is sending the price signal for market prices in Germany. The parties may therefore change the contract price formula to include 100 per cent TTF hub indexation.

Is there a need for a price review clause in this hypothetical? In short, yes. The TTF may not always be a reasonable measure of market prices in Germany. Rather, it may be that the TTF ceases to be a price signal for market prices in Germany at some point in the future and that the German hub, or other price signal, becomes the new price setter in the market. The price review provision remains capable of addressing this change in market conditions.

In any event, the European price review story is far from over. Price reviews under the remaining fully or partially oil-linked contracts continue – particularly in central and eastern Europe (and, to some extent, in western Europe as well). Indeed, Gazprom commenced a new price review against PGNiG, the Polish state gas utility, as recently as January 2022. International arbitration, thus, will continue to play an important part in the evolution of the central and eastern European gas markets.

More generally, the traditional European pricing model described above – which gave rise to the three waves of price reviews – is changing. Those changes are being caused by different global LNG contracting practices, and they will affect the future evolution of price review disputes in Europe.

First, the United States – as a relatively new exporter of gas – offers significant destination flexibility, with few, if any, restrictions on where the gas can be delivered. As a result, it is increasingly difficult for traditional suppliers for delivery to Europe to continue to demand destination restrictions. It is also increasingly difficult for suppliers to demand destination restrictions because government bodies, such as the European Commission, have stated that destination restrictions violate applicable competition law. In addition, liberalisation efforts in markets around the world, which make re-gas facilities more accessible, mean that the buyer now has more options for where gas can be delivered.

^{9 &#}x27;Gazprom Export seeks arbitration against PGNiG over contract price', Reuters (14 January 2022).

Second, with the United States now exporting LNG, European buyers are now contracting with US suppliers, with the price tied to Henry Hub. In these new contracts, the price is now set by point of origin rather than destination. This dynamic puts pressure on the traditional suppliers to rethink the traditional European models, because now European buyers purchase LNG from the United States and have greater freedom in the destination to which they will deliver the gas, paying a US price.

Third, certain European contracts are now being signed with 100 per cent volume flexibility (although there is still a take-or-pay obligation for the liquefaction fee). This dramatic reduction in take-or-pay liability offers significantly more flexibility than the traditional models.

Fourth, much like the US practice, there is a move towards shorter-term and more flexible contract structures. For example, Europe has seen an increase in portfolio sales, rather than anchor contracts, for location-specific sources. Traditional European contracts often specify the exact gas field from which the gas must be supplied. Many of the newer contracts, by contrast, impose no requirement concerning the source of supply. Under these portfolio contracts, the sellers simply commit to deliver X quantities of gas to Y location, without specifying the source.

These shorter contracts reduce, or may altogether eliminate, the need for price reviews. Under the traditional European model, price reviews often were available every three years. Under the new paradigm, however, if gas contracts are for only three years (or shorter), the interval during which the parties will be 'stuck' with the contract price is roughly the same (or less) – and the parties may not need a price review clause at all.

In conclusion, these changes in global LNG contracting practices, primarily from the United States, are having a significant effect on the traditional European model that spawned the three waves of price reviews. Certain elements of the traditional risk-reward balance are changing, because the contracts on which that risk-reward balance is based are changing. Nevertheless, although there are new contracts that have these new features, there are many historical European contracts that do not. Indeed, the International Gas Union reports that, although 44 per cent of LNG global pricing is now 'gas-on-gas', the remaining 56 per cent remains oil-based. Those oil-based contracts, signed years ago, live on and are still being performed. If history is our guide, price reviews under these legacy contracts will continue for many years to come.

¹⁰ International Gas Union, 'Wholesale Gas Price Survey', 2021 Edition, p. 17.

Asia: the future is now

In earlier editions of this chapter, the authors had predicted that Asia would be the next battleground for LNG price review arbitrations. Asia is home to the world's largest importers of LNG and natural gas. The region includes China, Japan and South Korea, which are the world's three largest LNG importers.

The history of LNG imports into Asia began in the late 1960s and 1970s, when importers signed long-term contracts for delivery of LNG into Japan. China and South Korea first entered the market in the late 1980s and early 1990s. From the outset, oil-indexed pricing was, and remains, the dominant pricing model for LNG in Asia.

When we wrote the first edition of this chapter, it was our belief that, although the number of European price reviews was diminishing, Asia would become the next Europe. Our prediction was borne of good reason: the Asian markets today are where European markets were two decades ago – markets in transition, where pricing is still largely tied to oil products. For this reason, we predicted that the next major battleground in price review arbitration would be Asia, which was, and remains, largely unliberalised and where end-user prices are largely set by the supply costs.

In the years following our initial prediction, however, only a small handful of buyers commenced arbitrations, rather than the droves that many expected. Some speculated that the lack of new cases was borne of a business culture that eschewed contentious dispute resolution. Others explained the inactivity by noting that some Asian gas contracts do not contain a price review clause, and those that do provide for less frequent price reviews (for example, every five years rather than every three years as typically seen in Europe). Subsequent editions of this chapter nonetheless continued to make the same prediction that, although price reviews in Asia were slowly advancing in fits and starts, at some point the price review revolution would begin in full force. That is, indeed, what has happened.

Price review arbitrations have officially launched in Asia – not just one case, but an entire collection of cases. From Japan to China to South Korea, many buyers under long-term, take-or-pay contracts are now moving forward with price reviews in arbitration – just as the early European pioneers did in the early 2000s. The authors are involved in several of these new arbitrations and numerous recently commenced price review negotiations.

The move towards arbitration appears to have been prompted by a combination of factors.

First, it is clear that the widely held view that these disputes could never proceed to arbitration because Asian companies seek to avoid dispute resolution is wrong. The notion that there is an Asian business practice in this regard has been fully put to rest.

Second, even in business cultures traditionally identified as avoiding disputes, there has been a gradual realisation that moving the resolution of price disputes out of commercial negotiations and into the hands of neutral third-party decision makers also has benefits for long-term partners. Rather than damaging the commercial relationship, market players have seen that arbitration can help facilitate and foster that relationship.

Many of these Asian price reviews underwent commercial negotiations for a period of several years at a time, giving rise to frustration and concern about the good faith conduct of a commercial counterparty. The move towards neutral decision makers and away from protracted, and sometimes fruitless, commercial negotiations has given rise to numerous Asian price reviews in recent times, including price review arbitration.

Dozens of Asian price reviews have taken place in the past few years alone. Whether most of these price reviews ultimately proceeded to formal dispute resolution is not a matter of public record, but it is known that several of them did, indeed, proceed to arbitration. For example, in 2018, Australian exporter North West Shelf LNG commenced arbitration with Korea Gas Corporation (KOGAS) over price. The following year, a price review arbitration between Osaka Gas and Exxon Mobil Corporation's PNG LNG in Papua New Guinea began. Likewise, we are aware of other parties to Asian gas contracts that commenced confidential price review arbitrations.

Third, buyers have shown an appetite to overcome what may have been previously perceived as jurisdictional issues or hurdles under their long-term sale and purchase agreements. Many Asian long-term contracts contain an express reference to arbitration within the text of the price review clause, while others neither expressly refer to nor expressly exclude arbitration within the clause's text. In the past, price reviews under clauses without an express reference to arbitration within the price review clause itself sometimes gave rise to early resolution on

^{11 &#}x27;Japan LNG Buyers Talk Tough as Spot Prices Drop to 3-Year Lows', *Reuters* (7 August 2019).

¹² id.

less favourable price terms because sellers were able to leverage buyers' concerns about potentially having to litigate a jurisdictional question prior to reaching the merits phase.

This negotiated outcome is increasingly no longer the case. Today, buyers are devising strategies to maximise dispute resolution options and to overcome perceived bifurcation challenges, even where a price review clause does not expressly mention arbitration. The issue has now been litigated in several major international arbitrations, including by the authors of this chapter.

Fourth, as with the European story, market changes in the major import markets have contributed to a rise in price review cases in Asia. In Japan, for example, utilities traditionally contracted to purchase large volumes of LNG under long-term contracts, typically linked to oil prices. Following the March 2011 Great East Japan earthquake and the subsequent Fukushima nuclear accident, electricity and gas market liberalisation intensified, prompting an evolution in the way Japanese LNG buyers contract for LNG. Within Japan, increasing market competition and energy efficiency improvements, combined with growth in renewable energy, has resulted in market shares for incumbent Japanese energy suppliers being eroded. In addition, these market changes have reduced domestic electricity demand and prices, while creating greater uncertainty about current and future power demand.

Fifth, a decline in long-term LNG prices since 2012 caused by an increase in LNG supply from the United States, Russia, Qatar and Australia as well as growth in short-term and spot LNG trading, increased competition among LNG suppliers, and the introduction of pipeline gas in certain markets, increasing gas-to-gas competition, has played an important role in the uptake of price reviews. In the context of these market changes, buyers are eager to ensure their market competitiveness under their respective long-term contracts by securing a competitive price, reflecting prevailing gas and LNG market prices, not a price set in the past decade under a contract that is still delivering but that is now unavailable in the market.

Finally, in recent years, a series of unprecedented events have created a highly changeable energy market, in which market players have been left in a permanent reactive state, firefighting each new market crisis. This has prompted a crucial behavioural change in the Asian market, whereby buyers have readily consulted their contracts to confront these issues, thereby enhancing the understanding of how valuable these price review provisions can be and, by consequence, removing any hesitation in seeking to invoke them.

These new price reviews sit at the crest of a new wave of arbitrations in Asia. And, indeed, if the Asian gas markets are to progress and mature as the European markets have done in the past two decades, international arbitration must again play an important role.

The outlook for price reviews now and in the future

In the intervening period between this and the prior version of this chapter, the world has confronted a variety of consecutive market events that, separately and together, have placed substantial pressure on the global energy markets. In 2022, the Russian–Ukrainian conflict came immediately after two other important events that contributed to major stress and tension in the global gas market.

First, the widespread consequences of the covid-19 pandemic included LNG prices hitting record lows during the 2020 lockdowns across the world, then surging to all-time highs in 2021. Second, the existence of reduced Russian gas flows and depleted European storage levels in the second half of 2021 caused rising gas prices and increased concern about supply security. These events created real and enduring stresses in the global energy market. Gas and LNG importers do not know how this will ultimately affect short-term and long-term supply security, and there are concerns about how the conflict in Ukraine will ultimately affect global supply and the market price reaction to any new dynamic in this regard.

At the time of this writing, significant uncertainty exists with regard to the availability of global gas supply as a result of the Russia–Ukraine conflict. Moreover, with importers looking to supplement their supplies from other sources on the short-term and mid-term market, where price protection in the form of a price review clause is often not available, the value and importance of a price review clause under a long-term contract increases significantly.

Bearing this in mind, importers of gas are consulting their contracts to identify what contractual remedies may be available to secure against these anticipated future energy price shocks. It follows that changing market dynamics and recent price volatility have placed additional focus on price review clauses. Of course, the availability of a price review will depend, as discussed above, on the temporal, procedural and substantive requirements set out in the contract. Nevertheless, market participants – both buyers and sellers – may now turn to their price review clauses as a means to address the present crisis. Whether the conflict and its economic consequences will give rise to a new wave of price reviews, and what effect these might have, remains to be seen.

Conclusion

Although the evolution of price review arbitration in Europe has been marked by three periods of increased activity, it has been a roughly linear evolution, as gas markets have matured away from oil indexation and towards hub indexation. International arbitration has been one of the primary vehicles by which pricing disputes have followed that evolutionary path. Now, a period of price review development is well on its way in Asia. As we reflect on the European journey and make predictions for the future in Asia, the road forward appears to be one of similar battles but with new challenges.

APPENDIX 1

About the Authors

Stephen P Anway

Squire Patton Boggs (US) LLP

Stephen Anway is global co-chair of the firm's international dispute resolution practice and a partner in the firm's New York and Washington, DC offices. In that role, he leads a team of more than 150 lawyers across 25 offices in North America, Europe, the Middle East and the Asia-Pacific region. Stephen acts as lead counsel and as an arbitrator in international arbitrations. He has represented the winning party in many of the largest international arbitrations in the world during the past 20 years. He has worked in more than 40 countries and has represented clients in some 125 international commercial and investment treaty arbitrations. He also is an adjunct professor of law on international arbitration.

George M von Mehren

Squire Patton Boggs (US) LLP

George von Mehren is global co-chair of the firm's international dispute resolution practice and a partner in the firm's London office. With 45 years of experience in complex adversarial proceedings, Mr von Mehren has been instructed in more than 100 energy industry disputes, of which 66 dealt with natural gas and LNG in Europe, the Americas and Asia. Together with Mr Anway, Mr von Mehren successfully represented the buyer in the first European price review arbitration in 2004.

Michelle Glassman Bock

Squire Patton Boggs (US) LLP

Michelle Glassman Bock is a partner in the firm's international dispute resolution practice in Brussels. Ms Bock's practice focuses on natural gas and other energy disputes. She has acted in more than 15 gas price reviews for both European and Asian parties to long-term gas supply contracts, addressing both jurisdictional challenges and the economic merits of price reviews.

Max Rockall

Squire Patton Boggs (UK) LLP

Max Rockall is a partner in the firm's international dispute resolution practice in London. Mr Rockall is an energy arbitration specialist, advising on an extensive book of cases, including natural gas and LNG price review disputes, LNG price renegotiation strategy development, cargo delivery and rescheduling disputes, force majeure claims, hardship pricing issues, change of circumstances claims, cargo delays, and diversions and cargo title disputes.

Squire Patton Boggs

Squire Patton Boggs (UK) LLP Premier Place 2 & A Half Devonshire Square London EC2M 4UJ United Kingdom Tel: +44 20 7655 1354 max.rockall@squirepb.com

Squire Patton Boggs (US) LLP Avenue Lloyd George 7 1000 Brussels Belgium Tel: +32 2 627 11 10 michelle.bock@squirepb.com

Squire Patton Boggs (US) LLP
Premier Place
2 & A Half Devonshire Square
London EC2M 4UJ
Tel: +44 20 7655 1395
george.vonmehren@squirepb.com

Squire Patton Boggs (US) LLP 1211 Avenue of the Americas New York, NY 10036 United States Tel: +1 212 407 0146 stephen.anway@squirepb.com

www.squire patton boggs.com

The energy industry nurtured and shaped what we now know as international arbitration, and, for a host of reasons – resource nationalism, oil price drops, geopolitics, climate change, sanctions and pandemics among them – it has remained one of the discipline's biggest clients.

The Guide to Energy Arbitrations, published by Global Arbitration Review, provides coherent and comprehensive coverage of the most common, difficult and unusual issues faced by energy firms, from some of the world's leading authorities. The book has been edited by J William Rowley QC, Doak Bishop and Gordon E Kaiser.

The Fifth Edition is fully updated and has new chapters on taxation-related ISDS and LNG arbitrations.

Visit globalarbitrationreview.com Follow @GAR_alerts on Twitter Find us on LinkedIn