IMPROVING TRANSPARENCY OF ENERGY COMPANY PROFITS

# REVIEW OF BIG SIX TRANSFER PRICING POLICIES

He Heren Ster

OCTOBER 2014



**FINAL VERSION 081014** 

# CONTENTS

#### **REVIEW OF BIX SIX TRANSFER PRICING POLICIES**

	EXECUTIVE SUMMARY	3
	PROJECT BACKGROUND, AIMS AND SCOPE	6
<b>A:</b>	TRANSFER PRICING - INTRODUCTORY OVERVIEW	9
<b>B:</b>	INTRODUCTION TO THE INDUSTRY AND ITS BUSINESS MODELS	14
C:	APPLICATION OF TRANSFER PRICING POLICY BY THE BIG SIX	19
D:	KEY FEATURES	23
	ASSUMPTIONS AND CRITICAL DEPENDENCIES	
	RISK AREAS	
	COMMENTS AND OBSERVATIONS	

FINAL VERSION 081014

#### Page 3

### **EXECUTIVE SUMMARY**

Ofgem has appointed BDO to undertake an in-depth review of the transfer policies of the Big Six energy companies, and assess their impact on the Consolidated Segmental Statements ('CSS'). BDO has met with each company to understand and assess their transfer pricing policies in this context.

#### WHY IS TRANSFER PRICING RELEVANT

Transfer pricing is one of the main priorities for tax authorities worldwide, as pricing within a corporate group could be manipulated to divert profits into a lower-tax jurisdiction if the rules are not properly applied.

Even where no clear motive for tax benefit exists, pricing between related parties may not be at arm's length. This may be due to insufficient or inappropriate application of the transfer pricing rules.

Transfer pricing rules require the application of the arm's length standard - pricing at third party rates as if the transaction was between unconnected parties. This arm's length principle is set out by the Organisation for Economic Cooperation and Development ('OECD') Guidelines on Transfer Pricing for Multinational Enterprises and Taxation Authorities ('the Guidelines') and is widely accepted internationally. In the UK the arm's length standard is required by tax legislation and both businesses and HM Revenue and Customs are responsible for ensuring that it is adhered to. When filing a corporate tax return, the signatory for a company is confirming that the arm's length standard has been met in the completion of that tax return.

#### Application to the Big Six - tax motives

Most of the transactions identified in our review take place within the UK, and as such there is unlikely to be any significant impact of transfer pricing policies on the overall UK tax position.

Where an overseas group trading partner is involved, this is broadly limited to France, Germany or Spain, all of which charge a higher headline rate of corporation tax than in the UK. This limits the tax incentive to shift profits through transfer pricing unless there were material brought forward or current year losses to offset those profits.

#### Application to the Big Six - commercial motives

Wider commercial advantages from the manipulation of transfer pricing should be more limited, as businesses should benefit from the transparent mapping of income and cost to their functions, assets and risks as required by the arm's length standard.

From a regulatory perspective there may be an incentive to decrease the likelihood of making losses in a trading entity, for example to maintain regulatory capital levels. This is a factor that could favour the location of income and profit in those segments reported in the Consolidated Segmental Statements prepared by the Big Six.

There may be other influences. For example, the culture of the parent company may favour the repatriation of cash regardless of the tax rates, or due to local reporting requirements.

The presence of these requirements has not been identified in our review.

#### Application to the Big Six - CSS transparency

Pricing between related group entities could be used to influence results reported in the CSS. Provided the business models used enable compliance with the arm's length standard, to manipulate the results through transfer pricing would conflict with other management reporting such as the measurement of key performance indicators for staff and business units. As such, there are barriers to this kind of manipulation in addition to the legal requirements for transfer pricing.

Ofgem has undertaken this review in response to concerns that profit may be moved between segments or out of the CSS altogether.

#### APPROACH

A framework for this analysis was drawn up to assess the economic, tax law and accounting implications of these transfer pricing policies for the CSS. Each of these key areas was considered, and their risk for transfer pricing and CSS transparency was rated. Conclusions were then drawn based on the details of individual businesses' transfer pricing policies. This review did not seek to replicate a full transfer pricing enquiry for tax purposes that would be carried out by HMRC.

The key issues, level of risk and conclusions from this study are summarised as follows.

## **EXECUTIVE SUMMARY**

	AREA FOR REVIEW	KEY ISSUES	CSS TRANSPARENCY POTENTIAL RISK	CONCLUSIONS FROM THIS ANALYSIS - CURRENT LEVEL OF RISK IN PRACTICE
nic	Business model	Would a third party structure its transactions like this?		
	• Is the segmental business model consistent with arm's length pricing?	<ul> <li>Are business models and supporting transfer pricing policies structured in the manner of third parties or for tax/reporting benefits?</li> </ul>	LOW	• Segmented model adopted widely in market and not limited to the Big Six; consistent with principal of management specialisation
Economic	<ul> <li>Are the timing and terms of transactions supportable?</li> </ul>	<ul> <li>Timing and terms of terms of transaction can impact price through liquidity and resulting pricing on wholesale energy market</li> </ul>	MEDIUM	<ul> <li>Policies are consistent with segmental objectives and aim to externalise risk</li> </ul>
	<ul> <li>Does the business model support the idea of benefits from vertical integration?</li> </ul>	<ul> <li>Vertical integration is not a requirement for a transfer pricing policy</li> <li>Primarily a disclosure risk - does transfer pricing policy disguise additional income and profit from vertical integration?</li> </ul>	LOW	<ul> <li>Matching generation and supply keeps more income and cost in the CSS, levels of materiality are currently low under the current models</li> </ul>
	Transfer pricing policy	Does the pricing policy meet the arm's length standard?		
Legal	<ul> <li>Is the pricing policy rewarding Trading consistent with the business model and robust?</li> </ul>	<ul> <li>Policy should match allocation of functions, assets and risks between segments</li> <li>Two broad models used - toll generation (greater activity and risk in Trading) and central broker (greater activity and risk in reported segments)</li> </ul>	HIGH	• Pricing is supported by third party comparables including wholesale market prices and third party joint venture agreements. These should be monitored to ensure they remain current and appropriate
Le	<ul> <li>Is the pricing policy for management and support services robust?</li> </ul>	<ul> <li>Charging for shared central services could reduce profit in reported statements</li> <li>Expectation for cost-based charge with appropriate allocation for benefit received</li> </ul>	MEDIUM	<ul> <li>Services charging policies have generally found to be conservative and broadly consistent with best practice</li> <li>Amounts are at a low level of materiality</li> </ul>
	<ul> <li>Is there a current transfer pricing enquiry by HMRC?</li> </ul>	<ul> <li>HMRC review should be expected to test compliance but a specific transfer pricing enquiry is a strong indicator of risk</li> </ul>	HIGH	<ul> <li>No current contentious issues have been identified by the Big Six</li> </ul>
	Implementation	Does the financial data reflect the transfer pricing policy?		
Accounting	<ul> <li>Is management reporting consistent with the transfer pricing policy?</li> </ul>	<ul> <li>Transfer pricing robustness is increased by its incorporation in the day-to-day financial management of the business and management team's KPIs</li> </ul>	LOW	• The Big Six follow best practice in this area, with transfer pricing policy included in management reporting
	<ul> <li>Is appropriate testing performed?</li> </ul>	<ul> <li>Transfer pricing policy should be implemented through invoicing and charging and tested by audit procedures</li> </ul>	HIGH	<ul> <li>All of the Big Six have external audit review of transactions; some have specific internal audit procedures</li> </ul>
	• Is the transfer pricing policy documented and supported?	• Transfer pricing documentation is a legal requirement and robust documentation increases comfort in the policy employed	MEDIUM	• The Big Six are able to document their transfer pricing policies where required

# **EXECUTIVE SUMMARY**

#### CONCLUSIONS

Transfer pricing is governed by an established set of guidelines, legislation and best practice. The Big Six, like other businesses, are constrained by these. HMRC reviews the position, and commercial management of the business also benefits from the appropriate application of transfer pricing principles.

As such, the opportunities for the Big Six to benefit from the manipulation of their transfer pricing are limited.

Based on our review, the current transfer pricing policies of the Big Six are not considered to have a material impact on the effectiveness of the CSS:

- The business models used by the Big Six appear to be consistent with what third parties would enter into.
- The transfer pricing policies used are based on comparable uncontrolled prices or methods set out by the OECD Guidelines.
- These prices and rationale can generally be evidenced and the Big Six have audit procedures (internal, external or both) to test implementation.
- While there are areas of subjectivity, the Big Six are clear in their intention to meet the arm's length standard.
- Nothing has been identified that is inconsistent with the arm's length standard that would materially impact the CSS.

When considering the audit requirements for the CSS and reviewing future statements, transfer pricing should be kept under regular review to ensure that policies and their supporting information remain current and appropriate as the market evolves. A specific audit requirement with respect to transfer pricing could help to achieve this.

Ofgem may also wish to consider these conclusions in light of the CMA's findings to confirm that they remain appropriate.



# **PROJECT BACKGROUND, AIMS AND SCOPE**

This section provides a brief overview of the Ofgem's Review of Transfer Pricing project together with the aims and scope of this report.

#### BACKGROUND

The Office of Gas and Electricity Markets ('Ofgem') requires the large vertically integrated energy companies ('the Big Six') operating in Great Britain to publish Consolidated Segmental Statements ('CSS') every year. This requirement was introduced in 2009.

The Big Six energy companies are:

- Centrica
- EDF Energy
- E.ON
- RWE npower('RWE')
- ScottishPower
- Scottish and Southern Electric ('SSE')

The CSS shows separate revenues, costs and profits of generation and supply activities for each of the Big Six. The aim of this is to provide transparency of where profit falls in the supply chain of these businesses, both increasing market confidence and facilitating new entrants into the energy market.

The CSS are kept under review by Ofgem and have been through successive rounds of improvement since their inception.

#### Transfer pricing

Despite these rounds of improvement, there is understood to be concern that companies can use their transfer pricing policies to unduly influence the profit figures they report in their generation and supply businesses.

Following Ofgem's March 2011 Retail Market Review, BDO were appointed to inform Ofgem's view of the reporting practices of the Big Six. This was published in the 'Ofgem Segmental Statements Review' ('the 2012 report').

The 2012 report looked at the area of transfer pricing among other things. It found that while the Big Six transfer pricing policies were broadly 'fit for purpose' and would likely meet the best practice set out in the OECD's Transfer Pricing Guidelines on Transfer Pricing. However, a more detailed review was recommended to consider the business models and rationale for the transfer pricing policies in more detail, in particular that the use of wholesale market prices does not distort reporting or pricing decisions.

#### AIMS AND SCOPE

To address this recommendation, and to improve confidence in the CSS, Ofgem sought a more detailed review to build on the previous work. This review required a more indepth assessment of the transfer pricing policies in use by the Big Six, including the use of wholesale markets as a basis for transfer pricing arrangements.

This review is to assess current transfer pricing arrangements based on economic principles, in addition to compliance with legal, accounting and tax requirements.

The objectives of the review are to:

- Consider in detail individual companies' transfer pricing policies, including changes since the 2012 report.
- Provide an economic, accounting and legal framework to assess the appropriateness of transfer pricing policies.
- Use this framework to assess the strengths and weaknesses of the transfer pricing policies, consider the materiality of any areas of potential concern and identify these.
- Draw implications for the robustness of the data in the CSS and its comparability across companies and over time.
- Identify possible changes to transfer pricing reporting practices which could help improve the CSS.

# **PROJECT BACKGROUND, AIMS AND SCOPE**

#### APPROACH

BDO have worked with Ofgem to deliver this project, the results of which will be shared with the Competition and Markets Authority ('CMA'), in the following stages:

- Qualitative review meeting with the Big Six energy companies to understand and discuss their business models and transfer pricing policies.
- Analysis and quantitative review considering the information provided, the materiality of key areas and their potential impact on the CSS.
- Comparative analysis considering each companies' business model and policy against each other to understand common or exceptional assumptions, methods or supporting data.
- Reporting setting out our observations and our conclusions on the current impact of transfer pricing on the CSS.

#### LIMITATIONS

This report (the 'Report') has been prepared by BDO LLP ('BDO') for Ofgem in accordance with the contract with them dated 29 May 2014 ('the Contract') and on the basis of the scope and limitations set out below.

The Report has been prepared solely for the purposes of reviewing the transfer pricing policies of the Big Six energy companies in the context of the CSS, as set out in the Contract. It should not be used for any other purpose or in any other context, and BDO accepts no responsibility for its use in either regard.

The Report is provided exclusively for Ofgem's use under the terms of the Contract. No party other than Ofgem is entitled to rely on the Report for any purpose whatsoever and BDO accepts no responsibility or liability to any party other than Ofgem in respect of the Report and/or any of its contents.

As set out in the Contract, the scope of our work has been limited by the time, information requested and explanations made available to us by the Big Six. The information contained in this report has been obtained from the Big Six sources. It was not within the scope of this report to consider the accuracy of information provided to us. BDO has neither sought to corroborate this information nor to test its overall reasonableness. Furthermore, any results from the analysis contained in the Report are reliant on the information available at the time of writing the Report and should not be relied upon in subsequent periods.

Accordingly, no representation or warranty, express or implied, is given and no responsibility or liability is or will be accepted by or on behalf of BDO or by any of its partners, employees or agents or any other person as to the accuracy, completeness or correctness of the information contained in this document or any oral information made available and any such liability is expressly disclaimed.

All copyright and other proprietary rights in the Report remain the property of BDO LLP and any rights not expressly granted in these terms or in the Contract are reserved.

This Report and its contents do not constitute financial or other professional advice, and specific advice should be sought about your specific circumstances. In particular, the Report does not constitute a recommendation or endorsement by BDO to invest or participate in, exit, or otherwise use any of the markets or companies referred to in it. To the fullest extent possible, both BDO and Ofgem disclaim any liability arising out of the use (or non-use) of the Report and its contents, including any action or decision taken as a result of such use (or non-use).



This section provides a brief introduction to transfer pricing, including its aims, requirements and practical application. This will provide context for later consideration of the transfer pricing policies used by the Big Six energy companies.

#### PURPOSE OF TRANSFER PRICING

Transfer pricing rules exist to ensure that the pricing of the provision of goods, assets and services (and so the allocation of related income and cost) between connected parties corresponds with third party arrangements, i.e. those made between two unconnected entities. These rules seek to prevent the misallocation of profit to low (or comparatively lower) tax territories, as well as enabling management and other stakeholders to obtain a more reliable view of the performance of each part of the business.

Many businesses have operations that are spread across a number of entities: either separate companies under common ownership, branches or divisions of the same company. These activities are usually specialised and aim to be complementary, enabling a tighter management focus on activities and objectives while seeking to avoid unnecessary cost from the duplication of activities in different locations. There may also be geographical, legal or regulatory reasons for structuring activities in this way.



For example, a simple business 'supply chain' might look like this:

These activities may be in one country or several.

Transfer pricing rules are applied to transactions between the entities in the supply chain. By applying a third party price - the 'arm's length standard' - at each stage, transfer pricing rewards each entity for its activity and the value it adds rather than allowing the business to manipulate where its profit falls (and so the rate of tax it pays) through the pricing of these transactions.

#### LEGAL AND REGULATORY FRAMEWORK

Transfer pricing rules have been in existence for many years, however their drafting and application has been growing more prescriptive and rigorous since the 1990s. The majority of countries now have transfer pricing rules in place.

#### The OECD and other international bodies

The Organisation for Economic Co-operation and Development Guidelines on Transfer Pricing for Multinational Enterprises and Taxation Authorities ('the Guidelines', available to purchase from www.oecd.org) is the leading source of transfer pricing principles. While the Guidelines are not themselves law, they are closely followed by many countries and are not limited to those territories which are OECD Members.

The Guidelines set out the principle of the arm's length standard and how this should be understood, applied and supported by both business and tax authorities. While some countries have minor variations in their application of the arm's length standard, very few that have transfer pricing rules follow a wholly different practice. To have a transfer pricing policy which is in line with OECD Guidelines is to be broadly considered compliant for tax authority purposes.

Other international bodies have also set out transfer pricing rules. These include the United Nations, which has its own guidelines, the European Union and the Pacific Association of Tax Authorities. While some difference of interpretation exist, the publications of these bodies remain consistent with the arm's length standard.

#### Local country tax legislation

Transfer pricing rules are implemented and given force through tax legislation in each country. In the UK this is the responsibility of HM Revenue & Customs.

A country's transfer pricing rules might set out the arm's length standards and business' requirements to meet and support it fully, or they might explicitly reference the OECD Guidelines as is the case in the UK. As a result variations in application can arise, for example supporting documentation rules may differ as might the treatment of a particular type of charge. However the arm's length standard is almost universally agreed upon.

The UK transfer pricing rules are contained in Part 4 of TIOPA 2010 and augmented by guidance in HMRC's Inspector's Manuals; s164 TIOPA 2010 provides the link between UK legislation and OECD principles.

#### **KEY PRINCIPLES**

To be robust, a transfer pricing policy must meet the arm's length standard. In other words, it must be what comparable third parties would agree under similar circumstances.

To determine an appropriate price, consideration must first be given to the facts and circumstances of any given transaction.

#### Rewarding substance - functions, assets and risks

An arm's length price should reflect the activities of the parties involved and the value that is added by each.

For example, if a manufacturer has also invested in the technical intellectual property of a product, owns the valuable production line assets and contains the strategic management team for the business, it may reasonably be expected to earn a larger share of the overall income and profit on the product compared to the distributor at the next stage of the supply chain which solely packages and ships to customers. Under the same principle, if a loss is made it is the manufacturer which carries the main risk and so would be likely retain most or all of that loss in this case.

This relationship should be captured through appropriate transfer pricing methods. These are set out below.

Key questions when determining where value is added in a supply chain include:

- Where are key decisions taken and who takes them?
- What are the key risks, who manages them and is liable should they occur?
- How is value derived, for example is it a premium or a volume product?
- What are the protectable assets which could not be recreated (or subcontracted) easily by a competitor, for example patented intellectual property?

It is also important to consider the industry in which the business operates as this could have particular expectations or requirements, for example regulatory conditions or established competitors.

#### Appropriate terms - what would a third party enter into?

When setting arm's length prices it is important to consider what type of transaction a third party would enter into. If comparable prices are available, for example where an entity provides the same services to a third party, under the same circumstances as it does to another related party within its own group of companies, the terms used for those prices should be assessed against those used between the group entities.

#### For example:

- There are some transactions third parties might not enter into under normal circumstances, such as disposing of the 'crown jewels' intellectual property that is critical to business success.
- Key terms may be different, for example group entities might sell with different lead times to third parties, changing how risks such as forecasting or stock management arise.
- Group entities might (implicitly or explicitly) be in an exclusive arrangement that a third party which is not tied into a group supply chain is not, potentially altering price or changing the risk of costs of spare capacity.

#### TRANSACTION TYPES

Transfer pricing, and the considerations it requires, applies to all transactions between connected parties within a business. These may be categorised as:

- Products (including raw materials and part-finished products)
- Services (including management and support services)
- Intangible assets (for example trade marks, patents and other intellectual property)
- Financing (including intercompany loans and interest)

Where no transaction takes place, for example where goods or services are provided for no payment, transfer pricing rules still apply to this provision as a price should be put in place to meet the arm's length standard.

#### TRANSFER PRICING METHODS

The OECD Guidelines set out acceptable approaches to setting and supporting transfer pricing policy.

#### Comparable Uncontrolled Price ('CUP')

A business may have transactions between its entities which also take place with third parties. For example, a manufacturer might sell to both related and third party distributors.

A market price for this type of transaction may also be known.

In both these instances the third party price may form a CUP, subject to a consideration of the terms of the transaction. Where available, a CUP can be the most robust transfer pricing method as the arm's length nature of the price is clear.

Where a CUP is not available, the below pricing methods may be applied.

#### Cost plus

Where the party providing the goods or services is primarily measured on its successful cost management then a cost plus method may be applied. This identifies the cost relating to the product or service and applies an appropriate mark up percentage to provide a profit margin proportionate to the value added.

For example, this method is often used for the pricing of back office services or routine manufacturing activities.

#### Resale minus

Where activities of part of a business are primarily rewarded on the sale price, for example distribution to customers at the end of the supply chain, those activities are rewarded by a percentage of that sale price. This incentivises the distribution entities' personnel to optimise the sale price achieved.

Both cost plus and resale minus measures are applied to target or budgeted amounts as the entity in question retains the risk in their area of focus, for example the need to control costs.

#### Profit split

Where is it not possible to identify a 'simpler' or more routine activity on one side of the transaction, for example where there is valuable intellectual property on both sides, a profit split may be used to divide profits between the parties.

#### Transactional Net Margin Method ('TNMM')

Where none of the previous methods are appropriate, the net margin for comparable activities may be determined and targeted as a reward for the activities in question. This target is usually used to determine an appropriate transfer pricing for related intercompany transactions, for example the sale of products to a distributor.

#### Other methods

Where none of these methods provide an appropriate outcome, the OECD permits other methods to be applied. However these will need to be justified and supported in order to be robust.

#### **ECONOMIC ANALYSIS - KEY CONSIDERATIONS**

Having considered the functions, assets and risks involved and determined an appropriate method, there is a requirement to determine an appropriate transfer price. Key steps to achieve this are:

- Determining whether a CUP exists and is appropriate for the transaction
- Where a good CUP is unavailable, an appropriate measure (consistent with the method selected) must be determined; this is often achieved through analysis of comparable third party financial data for the activities in question
- This comparable study will usually generate a range of results, reflecting that third parties will achieve different outcomes from similar activities. A point within that range must be selected for the business based on the nature of its activities in the context of the set of comparable data, for example a precision manufacturing activity might suggest a higher point in a range, reflecting the greater skill and risk involved. Some tax authorities are happy to accept a full range of comparable data, others mandate a narrower interquartile range; the latter is usually considered more robust.

During this process, the role of bargaining power should be considered: if a small manufacturer is dependent on a large distributor, their respective margins may be different than if these roles were to be reversed.

In the event of one-off or unusual transactions, for example a change to the business model which involves moving activities within a business, consideration should also be given to what options would be realistically available to a third party under similar circumstances. A business should be able to support why it has pursued its chosen approach.

#### APPROACH TO SETTING AND SUPPORTING TRANSFER PRICES

To put this theory into practice, businesses will go through a series of steps to set, implement and support a transfer pricing policy.

#### Functional analysis

The activities, value added and relevant transactions of each entity within the business should be identified and understood. This will typically be achieved through meetings with key personnel in each area to understand their roles and that of their part of the business in the overall supply chain.

This is a fundamental step as a transfer pricing policy will only be robust if it matches the substance of the business.

#### Economic analysis

For each transaction, the business will then determine an appropriate transfer pricing method and seek good comparable data to enable a price to be set.

#### Implementation

Having set the transfer pricing policy, this is then implemented within the business. This will include embedding it within the business' reporting system and aligning it to relevant key performance indicators.

The outcomes from the financial reporting system should be consistent with the expectations of the transfer pricing policy.

#### Documentation

The Guidelines set the expectation of transfer pricing documentation to explain and support the policy. This is typically a report which provides details of the industry context, functional and economic analysis and the financial results in respect of the activities in question. This is often produced annually, being updated for the latest financial results and any changes to the business model.

This is often supplemented with intercompany agreements which set out the terms of transactions between the entities in a business in the same way as if they were between third parties.

#### TAX AUTHORITY EXPECTATIONS

The main issue for any tax authority when reviewing transfer pricing policies is to ensure that pricing between the entities in a business does not lead to lower local taxable income than would have been the case between third parties.

To address this, tax authorities seek to:

- Identify the transactions involved and understand their business context.
- Confirm the appropriateness of transfer pricing methods and comparables used in the economic analysis.
- Test areas of subjectivity, for example the way an entity has been characterised or how a price has been selected from a range of comparable data, to ensure that this is appropriate.
- Assess whether these are transactions which would have been entered into (or entered into in this way) by third parties.

Transfer pricing rules require the production of supporting documentation to address these areas, and tax authorities will typically require and review this before enquiring into specific issues or concerns if these arise.

#### APPLICATION OF TRANSFER PRICING IN OTHER CONTEXTS

Transfer pricing can also be a useful tool for the management of a business to assess the performance of component entities. By placing appropriate levels of income and cost with each activity there is greater transparency over results and performance. The arm's length standard is an effective tool to achieve this.



This section provides an overview of the industry with a particular focus on the key considerations for its business models that will be relevant for this report.

#### BACKGROUND

The UK energy industry is a multi-billion pound market which has seen a gradual process of privatisation and consolidation of energy supply over the last 25 years, in which the Big Six collectively control an estimated 90-95% market share of domestic gas and electricity sales, and directly own an estimated 70% of generation capacity.

As a result of this consolidation, a number of the Big Six now operate as part of larger multinational energy groups operating in several different markets across Europe and worldwide. Each of these groups is made up of a number of separate legal entities which interact with each other on a day-to-day basis, both within the UK and across international borders.

#### ROLE OF THE ENERGY MARKET

The Big Six undertake both the generation of power which can be sold to the wholesale market, and the supply of gas and electricity to customers which can be purchased from the wholesale market.

The prices of power and gas, and fuels such as coal and natural gas have historically been subject to significant volatility. As such, the Big Six are exposed to commodity price risk when both selling and purchasing energy (ie the risk of adverse price movements either reducing the price at which a business sells its generated output or increasing the price at which a business purchases energy to resell to its customers).

In order to reduce or eliminate exposure to potential price fluctuations, the Big Six put hedging strategies in place.

Power and gas, and fuels such as coal and gas are widely traded both as physical supplies and as derivatives (typically futures, forwards and options) on wholesale and commodities markets, providing a means of hedging for the Big Six.

Prices on the wholesale energy market are defined by a number of different factors including market liquidity - generally speaking, this is the availability of trading counterparties buying and selling in the market - which help to define prices. The energy market trading prices are used as a benchmark within the industry. If there is no market liquidity (for example, if there are no counterparties willing to trade) there will be no market price available to use as a benchmark.

Liquidity typically varies over a number of different time horizons. Beyond a certain point in the future (often measured in years), the risk of potential energy price volatility is so great that the risks of trading cannot be practically hedged against, forming a liquidity horizon. In addition, other factors such as the date of announcement of government carbon floors may create further horizons. These horizons are points beyond which market uncertainty makes effective hedging impractical, thereby defining market liquidity.

#### THE BIG SIX SUPPLY CHAIN

The Big Six operate business models which typically feature a supply chain encompassing:

- · Procurement of fuel in order to generate power
- · Trading in the wholesale energy market
- Sale of gas and electricity to domestic and non-domestic customers.

These functional segments can be split into 'Generation', 'Trading' and 'Supply' segments. The structural organisation of these segments varies with each business and typically involves a number of different legal entities (with the exception of SSE, where Trading and Supply are contained within the same legal entity), with each division appearing distinct and operating with a high degree of autonomy.

Each business' Generation segment is broadly responsible for efficient management of generation assets, most typically a network of oil, coal, gas or nuclear power stations, and renewables. Depending on the operating model of each business, Generation may either concentrate entirely on maximising the efficiency and flexibility of its assets, or take on additional responsibilities such as fuel procurement and managing their contractual and physical positions with the System Operator, who balances the system. Balancing is the process that ensures that there is an appropriate amount of power in the electricity network at any time.

While the details of the Trading segment's role vary between companies, it essentially acts as an interface between the Generation and Supply segments and the wholesale energy market. Both Generation and Supply seek to limit their exposure to the risk of fluctuating wholesale prices through hedging. The Trading function typically executes these hedging transactions.

Some of the Big Six businesses undertake proprietary trading activities. These may have incidental benefits for the business's energy supply chain, such as providing market intelligence or disguising a trading position, but are run wholly separately and on a different business model to the Trading segment.

Supply is responsible for purchasing power and gas from Trading and selling it on to end users. While there are again variations in the way that a Supply segment carries out this function, Supply in most Big Six businesses is also responsible for forecasting demand and determining pricing and market strategies for the power and gas that they sell.

#### **SEGMENTAL FOCUS**

The division of each of the Big Six businesses into separate segments for Generation, Trading and Supply has enabled management objectives to focus separately on each division and the optimisation of its business operations. This segmental focus is now standard practice within the industry. For example, although there are some differences between different businesses, typically:

- Generation is incentivised mainly on their success in operating and maintaining their power plants and other generation assets.
- Trading is focused on executing trades and hedges on behalf of Generation and Supply, with any proprietary trading activity that they undertake on their own behalf kept separate from these transactions.
- Supply is primarily concerned with sales to customers, including forecasting demand, sales strategies and marketing.

In this context, when Generation sells power and gas (or options over capability, discussed below) to Trading, it is in the interest of both sides to extract the best possible price from their own perspective. Similarly, Supply will aim to purchase power and gas through Trading at the best possible terms determined by its own procurement strategy.

#### **RISK MANAGEMENT AND HEDGING**

When segments within a business trade with each other, the primary reference point for pricing their trade in power and gas will normally be market prices. As discussed, the wholesale energy market is a complex amalgamation of all the transactions entered into by energy generators, traders and suppliers. The result of all these transactions is a market price for power and gas which has historically fluctuated considerably depending on a wide range of factors including demand, availability of supply, season, weather, economic growth and forecasts.

Because of this volatility, businesses and operating segments within the Big Six use hedging to minimise their exposure to potential price fluctuations.

Hedging is used by different segments for a number of purposes. For example, Supply may sell power and gas to customers at set prices over a long time horizon (often up to two or three years, and most frequently within one year). Supply will therefore wish to fix the price at which they buy this power and gas and will use hedging products including futures, forward contracts or options in order to minimise their exposure to the risk of wholesale price fluctuation.

From another perspective, Generation would ideally wish to sell its output as far in the future as possible in order to guarantee their revenue income. However, the further in the future that they make a sale, the greater the exposure to market price fluctuations. Generation will therefore hedge against the price of power and gas on the wholesale market in order to fix the price at which they can sell.

Market liquidity is therefore an important factor in determining what risks can and cannot be hedged, and therefore how far in advance contracts can be made. The further ahead a hedging contract is agreed, the greater the risk of price variation. After a certain point, it will not be possible to hedge potential trades due to a lack of willing counterparties, and the market can be said to be illiquid.

Each segment within a Big Six organisation will normally consider its risk management independently of the rest of the business, and will hedge according to its own requirements, including for its transactions within its own group. For example, a Generation segment may hedge its sales of power and gas (or options over capability) both on the wholesale market and to Trading, while Supply may hedge both against the price risk of purchases of power and gas made from Trading and the wholesale market, and against sales made at fixed prices to end users.

#### INFLUENCING FACTORS

A key part of the decision making functions undertaken by Generation is therefore asset optimisation in order to run the right generation assets at the right time in order to maximise the efficiency of the entire generation portfolio, including minimising costs. Some functions typically done by Generation are also directly responsible for managing their contractual and physical positions with the System Operator in the most efficient and practical way.

There are a variety of other factors which may influence the current pricing policies employed by the Big Six businesses.

A number of governmental climate change initiatives exist which increase the potential cost of emissions for energy generators, for example the Carbon Price Floor ('CPF') which was introduced in December 2010 and became effective April 2013 in the UK, and emissions trading in a number of countries in Europe and North America. These regulatory and taxation factors impact on future energy prices, and therefore influence the hedging of prices past the horizons of each policy announcement. For example:

- Levy Exemption Certificates ('LEC') are used to provide exemptions for businesses from charges placed on the use of fossil fuels. The value of the LEC is related to the levels set for the Climate Change Levy.
- Renewable Obligation Certificates ('ROC') are issued to renewable generators based on their output - obligated suppliers must submit a set number of ROCs or pay a buyout fee each year.

#### VERTICAL INTEGRATION

Vertical integration is the combination of an organisation's supply chain into one group of companies. In the context of the energy market, the Big Six businesses are all vertically integrated, meaning that they are active in Generation, Trading and Supply.

While a business trading internally at arm's length would undertake intragroup transactions on the same terms as would have been agreed between third parties, there is still the potential to realise benefits of vertical integration while acting at arm's length. For example:

- The energy generation and supply industry is characterised by high volumes and low margins, and the economies of scale available to large integrated businesses can provide a significant cost saving when applied across an entire supply chain. A reduction in the cost of capital (relative to non-integrated businesses) reduces exposure to the risk of volatility in market prices impacting margins.
- Pricing terms for trading in power, gas and commodities are often influenced by the collateral available to the trader against which they can secure a deal. In this context, a vertically integrated business backed by significant generation assets can realise a market advantage.

Ofgem have identified that vertical integration can create costs in terms of reduced competition in the energy market and lower levels of liquidity that could occur as a result. The business model adopted by a vertically integrated business can influence these costs, for example trading between segments independently through the wholesale energy market can preserve or enhance liquidity and might mitigate these potential costs.

#### **CHANGES SINCE 2012 REPORT**

There have been a limited number of changes to the market that impact the business models and transfer pricing policies of the Big Six since the 2012 report.

Key changes that were identified in the course of this review are:

- The time horizons for the hedging of generation into the wholesale energy market have shortened slightly compared to our findings in 2012, although they are subject to variation.
- Some of the Big Six have made changes to the corporate structure, with a change to the group company which performs certain functions.
- Supply segments are focused on potential changes which may limit customer pricing and so impact hedging strategy, although this is understood not to impact the position reviewed in this report.

# C: APPLICATION OF TRANSFER PRICING POLICY BY THE BIG SID

### C:APPLICATION OF TRANSFER PRICING POLICY BY THE BIG SIX PRINCIPLES

This section sets out how the generic transfer pricing principles set out in Section A apply to the Big Six business models described in Section B. This will describe the key considerations and common features to provide a general understanding.

#### TRANSFER PRICING AND THE BIG SIX

Transfer pricing addresses two requirements of the Big Six:

- Meeting tax reporting requirements, in particular where trading operations are located in more than one legal entity and if entities are in more than one country.
- Ensuring an appropriate allocation of income and cost between segments for management and regulatory reporting purposes.

Although the second of these is not a requirement of the tax legislation where transfer pricing rules are found, the arm's length standard is a widely accepted principle which can be usefully employed.

For both these reasons, the underlying expectation is that the Big Six will be compliant with the arm's length standard when setting prices between their segmental activities.

#### **KEY TRANSACTIONS**

Under the business model employed, with some variation, by the Big Six there are certain key transactions to which transfer pricing applies.

#### Sale of power/capacity

The Generation business produces energy which is supplied into the market. This supply is typically through the Trading segment of the supply chain.

The relationship between Generation and Trading will influence the transfer pricing policy used. This is generally characterised as either:

- Toll generation where generation capacity/capability is sold in advance for hedging or optimisation by Trading; Generation is effectively solely responsible for the running of plant.
- Central broker model Generation is responsible for its hedging policy, which is implemented by Trading acting as a broker. Generation retain a greater level of risk in this model, including the risk of delivery on the day.

These models encompass essentially the same set of functions and risks, however under the toll generator model the hedging or optimisation activities sit with Trading while under the central broker model these activities sit primarily in Generation.

The expectation under transfer pricing principles would be that the activity with the lower level of risk - such as Generation under a toll generation model - would receive a lower but more stable reward; the higher risk or more entrepreneurial activity could receive a higher reward, but this would be more likely to fluctuate or even create a loss in bad years.

This is reflected in the transfer pricing policy.

- Toll generators typically sell their capacity or capability to Generation in advance as options to produce, using a price taken from the energy market based on the terms of the option (for example the time of exercise - ie delivery of the power). It is then up to Trading to hedge this effectively in the market and to address the risk of price movements on the energy market.
- Under the central broker model the Trading segment is more routine, acting as a broker in return for either a broker fee which may be benchmarked against market rates or the reimbursement by Generation of its costs of providing the service. Generation retains the risk from the actions needed to hedge production in the energy market.

Both use the energy market price at a particular time horizon to determine the reward for Generation. This is considered to be a CUP for transfer pricing purposes as it is generated by third parties acting in the market.

Adjustments are made to this market price by companies, for example discounting the sale of capacity/capability to reflect volume and the reduction of risk, or setting the broker return for Trading. While setting these adjustments is within the control of each business, the arm's length standard must still be met.

In the context of the value of generation involved, the value of these adjustments is considered to be comparatively small but still material - generally less than 1% of operating profit for the Generation segments of the relevant businesses.

It should be noted that power from renewables cannot be hedged due to its lack of long term predictability. This is sold to the market and purchased at the time of its delivery.

### C:APPLICATION OF TRANSFER PRICING POLICY BY THE BIG SIX PRINCIPLES

#### Fuel procurement for Generation

Fuel procurement is a significant cost of energy for conventional generation. The business models of the Big Six address this in a similar way as for wider generation activities.

Procurement activities and associated risk may be taken on by either Generation or Trading personnel. This will depend on the version of the business model being used.

- Toll generation Trading will generally have either part or full responsibility for fuel procurement on behalf of Generation activities. This is reflective of the expertise and market infrastructure of the Trading segment. The cost of fuel may be passed or notionally allocated to Generation for the purposes of the CSS.
- Central broker model Generation will have primary responsibility for fuel procurement with the Trading function acting in support as a broker. Generation will recognise the cost of fuel directly.

#### Acquisition of power and gas by Supply

To meet customer needs, the Supply segment acquires energy from the market. The Supply segment is usually supported by Trading as the latter has the infrastructure to interface with the market.

While there is nothing in theory tying a Supply segment to its Trading team, to use a third party broker instead or in addition would require the additional cost of the trading apparatus. As such, this approach is not followed.

Supply will typically hedge its expected or known requirements into the market over a period. This period is modelled and set by Supply and the hedge is built up over that time.

Trading will be rewarded for its activities based on mechanics such as:

- A broker fee or administration charge to cover its costs
- A risk premium to reflect prices being agreed ahead of time

Again, the energy market price will either be the price between the segments or form the basis for its calculation. Each business will set either the broker fee or risk premium, however these must meet the arm's length standard to be compliant for transfer pricing purposes. A limited number of large industrial and commercial clients use 'Flex' tariffs with the Big Six. These give customers access to the energy market at prices shown on the screen, effectively enabling them to manage their own hedging policy. In general, income for the Big Six providers of this tariff is derived from the broker and other services provided.

When hedged positions are 'collapsed' in advance of delivery there is an opportunity to match a business' own generation with its supply requirements where these options have been acquired. This can save costs such as broker fees.

Big Six businesses perform matching to differing extents. In general it is treated as an incidental administrative activity that can be automated.

#### Provision of trading support

The connected party transactions entered into by the Trading segment have been addressed in the context of Generation and Supply.

Essentially, the Trading function either performs:

- Management of the hedging risk, for which it receives a discount (or similar risk premium) on the market price to compensate Trading both for its costs and the risk it assumes; a profit or loss could result from this if Trading is not successful in managing these costs and risks; or
- A service function for Generation, when Trading receives a broker fee or payment to cover its costs.

These amounts should be supported by comparables available from the industry or market in order to meet the arm's length standard.

Many of the Big Six enter into proprietary or speculative trading. We understand this to be wholly separate from the Trading function within the energy supply chain, with all sales or purchases to or from a speculative trading book passing through the energy market at publically quoted prices.

While some benefits from proprietary trading may be identified, for example increased price visibility or the ability to mask hedging positions using trades made with other objectives, these are considered to be limited and incidental.

### C:APPLICATION OF TRANSFER PRICING POLICY BY THE BIG SIX PRINCIPLES

#### **OTHER TRANSACTIONS**

Other transactions entered into between Big Six entities are covered by transfer pricing. Principally, these are:

#### Management services

These are usually for management and common support services, for example HR or IT functions which are operated centrally by the business to avoid duplication. These are typically charged using the cost plus method to reflect the limited level of risk involved in providing this type of service. The 'plus' added to the cost of the services based on third party comparables is typically low, for example between 3% and 10% of the relevant cost.

The Big Six operate central services teams to cover a range of this type of function. These are charged on a cost plus basis in proportion to their use by different parts of the business.

These are of a low level of materiality.

#### **Royalties**

The existence of royalty payments was explored with the Big Six, for example in the context of providing trade marks or intellectual property such as energy market modelling tools.

No transactions were reported that were rewarded by a royalty mechanism.

#### Financing

It is common for large businesses to lend funds around the group to maximise their return from surplus cash.

This type of intercompany lending takes place within the Big Six. The primary benefits from this are to improve companies' cash position and collateral. The result of improved collateral is a lower requirement to make up front payments against forward hedging, so tying up less of the group's available cash balance and reducing the cost of managing its hedging positions.

Transfer pricing requirements place a limit on amounts which can be loaned between group companies at the maximum that would be lent on similar terms between third parties (for example by a bank). Transfer pricing also requires an arm's length interest rate to be applied to these loans, either based on central bank lending rates or a business' external borrowing cost with adjustments for the difference in risk and terms in the loan to the individual group company.

This is a potential benefit of vertical integration. However this is not an income or cost which directly impacts the CSS and so has not been considered in detail in this report.

#### **OVERVIEW OF CHANGES SINCE 2012 REPORT**

There has not been significant industry-wide change since the 2012 report.

Particular changes identified in this review include:

- Changes to broker fees paid to Trading segments, where a single broker fee has been split between a fee to cover broking costs and a separate recharge of the administrative costs of the Trading function.
- Adjusting the level of reward for Generation to reflect an increase in the cost of plant operation.
- Minor changes to the pricing of power purchase agreements (PPAs).

These changes are not considered to have had a material impact on the transfer pricing policies of the Big Six.



A framework to analyse and assess the appropriateness of a transfer pricing policy and its potential impact on CSS reporting will need to address the business model used, the transfer pricing policy and supporting data applied to it, and the implementation of that policy by each company. This will involve considering the economic basis for the model, whether the transfer pricing meets the legal requirements of the arm's length standard, and confirming that it has been accounted for appropriately.

BUS	INESS MODEL	TRANSFER PRICING POLICY	IMPLEMENTATION
Would a third party structure its business and transactions like this?		Does the pricing policy meet the arm's length standard?	Does the financial data reflect the transfer pricing policy?
Key issues		Key issues	Key issues
	s a segmental business model consistent with arm's length pricing?	• Is the pricing policy rewarding Trading robust and consistent with the substance of the business model?	<ul> <li>Is management reporting consistent with the transfer pricing policy?</li> </ul>
• 0	Are the timing and terms of transactions supportable? Does the business model support the idea of benefits from vertical integration?	<ul> <li>Is the pricing policy for management and support services robust?</li> <li>Is there a current enquiry into transfer pricing policy by HM Revenue &amp; Customs?</li> </ul>	<ul><li>Do the businesses take appropriate steps to test and confirm compliance?</li><li>Is the transfer pricing policy documented and supported?</li></ul>
	ECONOMIC	LEGAL	ACCOUNTING

This section will follow this framework to:

- Set out and discuss the critical assumptions common or prominent amongst the business models and transfer pricing policies of the Big Six.
- Identify the strengths or weaknesses of particular models or policies.
- Assess these results on a comparative basis.

To be effective and robust, transfer pricing policies must be closely linked to the substance of a business model. As discussed, these policies can require an element of subjectivity, for example of their application of a particular approach or price selected from an arm's length range.

As such, it is most practical to discuss the business models and transfer pricing policies in the context of higher and lower levels of risk. In this context, risk is understood as either:

- A risk that the transfer pricing policy might be successfully challenged by a tax authority.
- The area covered by the transfer pricing policy could have a large impact on the allocation of revenue and costs in the CSS.

The risk will be categorised either as low, medium or high risk.

When assessing the business models of the Big Six for transfer pricing purposes, the key issue is whether a third party would have structured its affairs in that way and entered into the transactions in question on comparable terms.

Following the framework for analysis, this section will examine:

- The use of a segmental business model
- The terms and timings of transactions
- The potential impact on vertical integration benefits

#### SEGMENTAL BUSINESS MODEL

The Big Six operate models which the industry accepts optimise operational performance through a focus on the functions, assets and risks specific to each segment.

Transfer pricing does not require a certain type of business model. However it does require consideration of whether third parties would act and transact in this way.

Evidence supports the arm's length nature of this type of business model:

- Independent operators in the energy market, for example generators or suppliers, similarly focus on efficient performance of their core activity and engage with the wider market to sell/acquire energy through the wholesale energy market.
- This model has been adopted by all of the Big Six; while there are variations in the details of each business' implementation none have departed from the basic template suggesting that this is viewed as the commercially optimum model under present market conditions.
- The transfer pricing policies used rely on comparable pricing data which is readily available from third party sources primarily the wholesale energy market showing that these types of transaction at each stage of the supply chain are commonly entered into at arm's length.
- It is common for large businesses to seek to optimise performance through a divisional focus on certain key performance indicators to encourage specialisation.

Provided that the transfer pricing policies applied by the Big Six are consistent with the allocation of functions, assets and risk in each business, the transfer pricing risk from the use of a segmental business model by the Big Six is considered low.

For CSS reporting purposes, the segmental nature of operations is essentially consistent with reporting requirements.

The main risk to the CSS is transparency, ensuring that it is clear which segment contains each activity so that the transfer pricing implications and resulting reported financials may be clearly understood. Companies are free to adjust their business model, so this is viewed as a question of disclosure with a low level of risk overall.

The structure of the business model and requirements of being part of a wider group create the risk that operations may enter into transactions on terms or at times which are less advantageous than those available to third parties. This could reduce the profit shown in the parts of the business covered by the CSS reporting.

These include:

- The externalising of key risks by Generation and Supply businesses through the up front sale of capacity/capability or hedging activities
- The setting of time horizons for transactions by Generation and Supply businesses in the context of the wholesale energy market

#### TERMS AND TIMING OF TRANSACTIONS

#### Overview

The structure of the business model and requirements of being part of a wider group create the risk that operations may enter into transactions on terms or at times which are less advantageous than those available to third parties. This could reduce the profit shown in the parts of the business covered by the CSS reporting.

#### These include:

- The externalising of key risks by Generation and Supply businesses through the up front sale of capacity/capability or hedging activities.
- The setting of time horizons for transactions by Generation and Supply businesses in the context of the wholesale energy market.

In general, the type of business model used by the Big Six externalises significant risks from Generation and Supply through activities such as the forward sale of capacity and the hedging of supply requirements. Essentially the risk of market fluctuation is put out into the energy market.

This is reflected in the transfer pricing policy through the timing of transactions and, in certain cases, a discount or payment provided to Trading in respect of the market risk that Trading may take on.

Again, this is understood to be the most effective commercial model, adopted by all of the Big Six.

To externalise this risk in practice, the Generation businesses of the Big Six sell either capacity/capability forwards to allow a hedge to be built up or set up their own hedge in the energy market. Similarly the Supply businesses build up a hedge to offset their customer obligations.

#### Transfer pricing

The transfer pricing questions triggered by this business model are:

- Whether a third party would externalise this risk in the same way for the same reward?
- Whether the terms entered into when externalising this risk, either by Generation or by Supply, are supportable at arm's length as comparable to what third parties would do under similar circumstances.

Third parties can be seen to externalise risk in a similar way. For example independent generators will sell power into the market as soon as liquidity becomes available. Large industrial customers will seek to put in place their own supply hedge by using the Flex tariff. This is also evidenced by third party joint ventures entered into by the Big Six.

Also the energy industry is essentially a volume business. By relying on sales in large quantity at small margins, a small price movement can have a large effect on profitability if it is unhedged. As such, this type of externalising of risk may be considered reasonable at arm's length.

The rationale of the Big Six for using their selected time horizons may be summarised:

- Generation businesses want to achieve certainty of income; this helps them make management decisions about the operation of plant as well as shorter term run/don't run decisions. For the nuclear fleet where fuel and allowances costs are less significant, a sale price is offered far ahead of market liquidity to the market.
- Supply businesses similarly want to achieve certainty of cost against their gas and energy delivery requirements. This can be over a shorter horizon, reflecting the typical duration of customer pricing arrangements.
- Both actions are consistent with the aim of managing the risk of market price fluctuations.
- The limits are essentially set by practical liquidity levels in the wholesale energy market, which is driven by third party supply and demand.

The structure of the business model and requirements of being part of a wider group create the risk that operations may enter into transactions on terms or at times which are less advantageous than those available to third parties. This could reduce the profit shown in the parts of the business covered by the CSS reporting.

#### These include:

- The externalising of key risks by Generation and Supply businesses through the up front sale of capacity/capability or hedging activities
- The setting of time horizons for transactions by Generation and Supply businesses in the context of the wholesale energy market

This leads to the second question - whether the terms of sale or purchase of energy are what third parties would enter into at arm's length?

This creates transfer pricing risk as the time horizons at which energy is sold can have a material impact on the wholesale energy market price. For example, if a transfer pricing policy obliges a Generation business to sell capability to its Trading segment further ahead of delivery than a third party would choose, the market price may be lower leading to lower income and profit in that Generation segment (to the potential benefit of the Trading activities).

From our review, the level of risk in practice is seen to reduce:

- Where energy is sold into the wholesale market the transaction will be between third parties and so is outside the scope of transfer pricing it is de facto at arm's length. These transactions may be between Big Six companies (either hedging or speculative trading books) or with other parties.
- Under a central broker model, the reward for broker services provided by the Trading segment is based either on third party broker's fees or the cost of Trading providing that service. These amounts can be supported as being at arm's length. The Generation and Supply segments will be rewarded (or otherwise) based on the performance of their management and hedging strategies.
- Under the toll generation model and corresponding supply arrangements where a discount or optimisation payment is made, that adjustment to the market price must be supported by appropriate third party comparable data to meet transfer pricing requirements. The pricing of these policies is discussed below.

Within these arrangements there is little opportunity for speculative profits from trading energy as the focus is on minimising risk from movements in the energy price or spread.

Under both of these models the profit or loss from the risk of market fluctuation is moved outside the energy supply chain. This occurs through transactions based on third party prices drawn from the wholesale energy market.

#### Transfer pricing risk

From a transfer pricing perspective, provided the intercompany pricing reflects the substance of the activities in question, for example hedging or the provision of production capacity, the risk is considered to be low.

For CSS reporting purposes, the risk of distortion to the Statements is considered low. However Ofgem may wish to provide more context on the nature of these activities emphasising how risk is managed - in any information provided for potential new entrants to the market. This would place the level and fluctuation of profit in the Generation and Supply segments in context of the level of business risk assumed by these operations.

For transfer pricing purposes, this is supported by the transfer pricing policy itself.

The structure of the business model and requirements of being part of a wider group create the risk that operations may enter into transactions on terms or at times which are less advantageous than those available to third parties. This could reduce the profit shown in the parts of the business covered by the CSS reporting.

#### These include:

- The externalising of key risks by Generation and Supply businesses through the up front sale of capacity/capability or hedging activities
- The setting of time horizons for transactions by Generation and Supply businesses in the context of the wholesale energy market

A wholly different strategy and approach to the market is likely to give rise to a different level of profitability in the Generation and Supply segments. However, this would involve these businesses taking on a greater level of risk around market price fluctuation for both energy and fuel costs. This might result in greater profits reported in the CSS in a good year or with successful management, however this also creates the potential for lower profits or losses if that situation is reversed.

The transfer pricing policy reflects the risk profile of the businesses as this takes market price over these time horizons as a basis. As such, the level of transfer pricing risk in this area is medium.

#### CSS transparency risk

CSS transparency may be similarly affected by any manipulation of income or cost in a reported segment by using specified hedging horizons to influence likely market prices. This risk is increased when the potential for vertically integrated businesses to match Generation's capacity or capability to Supply's requirements is considered.

However, the CSS seeks to show the outcome of the transactions undertaken, not those which might have arisen under a different business model. Using an alternative model may give a different result, but not one which would be expected to increase profit under all circumstances.

The ability to influence the profit of reported segments in this way, while still subject to limitations, gives rise to a medium level of risk for transfer pricing and CSS transparency purposes.

Vertical integration is where a supply chain of a business, including its upstream producers and downstream distributors, are owned by that business. It is a reasonable hypothesis that operating an end-to-end supply chain gives the opportunity to capture benefits, and that these benefits might include lower costs which may be passed on to customers either wholly or in part.

#### VERTICAL INTEGRATION

#### Overview

Vertical integration is not itself a requirement or key test of transfer pricing rules. However, where vertical integration benefits exist, a transfer pricing policy is expected to address these benefits.

The transfer pricing requirement to use arm's length prices for each transaction within this supply chain could work against vertical integration benefits, as comparable prices might be drawn from entities which are not vertically integrated themselves.

The most obvious way a transfer pricing policy might pass on savings from vertical integration would be through a cost-based method - as cost is reduced, so the price to the next stage of the supply chain is lower.

In an industry where the majority of participants are structured in a vertically integrated way, a market price might be considered to incorporate cost savings and income requirements from willing buyers and sellers. This is appropriate for the Great Britain energy market where vertically integrated businesses comprise approximately 70% of the market.

This observation suggests that the use of wholesale energy market prices as a basis for transfer pricing need not offset any benefits of vertical integration. However this is subject to the conclusions of a broader market review which is outside the scope of this study.

#### Matching

Matching occurs when the production from a business' Generation segment is used in that business' Supply segment. When the hedge is collapsed prior to delivery, the Big Six can use offsetting arrangements to match their own generation and delivery requirements. A mid price is often used as a transfer price on these occasions, which would normally increase the margin for Generation while reducing the cost for Supply.

Each of the Big Six have a different approach to matching. In general, matching is viewed as an incidental or administrative step which happens in a minority of cases.

Where the pricing arrangement can be shown to be reasonable at arm's length, the pricing of matching arrangements itself should not give rise to transfer pricing risks. The transfer pricing risk is therefore considered to be low

By matching a material amount of options at a different price than those addressed wholly through the market, a challenge to an arm's length position may arise:

- For transfer pricing purposes, the market price might be a more robust comparable (subject to how supportable any adjustments are).
- For the CSS, where different levels of matching take place there may be an inconsistency in where the associated income and costs would fall in the CSS; for example if one business were to match 5% of transactions but in fact supply 30% of its own Supply requirements, the allocation of profit between the CSS and the Trading segment could differ compared to another which matched the full 30%.

However, this would require the use of a different business model by the Big Six in the majority of cases. As discussed above, provided a business model reflects terms a third party would enter into, transfer pricing does not mandate that a particular model must be applied.

#### Finance

A key benefit of vertical integration identified by Ofgem is the potential for an improved financial position which improves collateral and reduces the cost of placing and purchasing energy for forward hedging in the market.

This financial position is assisted by intercompany lending (or similar availability of funds).

Transfer pricing requirements would not prevent this. An arm's length rate of interest would be required on intercompany loans, and for tax purposes interest would not be a deductible expense on lending over and above what a third party would advance. However, for the CSS these costs would fall below the line of what is disclosed. As such, financing costs are not directly relevant to the purposes of this report and have therefore not been considered in detail.

Where collateral requirements require a guarantee from another company in the business, for example the ultimate parent company, at arm's length a fee should be charged to the recipient of that guarantee. This could cause an additional cost in the CSS, reducing reported margins. From our discussions, guarantee fees are rarely used, and under such circumstances the risk to CSS transparency is low.

### D: TRANSFER PRICING POLICIES - KEY FEATURES TRANSFER PRICING POLICY

Transfer pricing is a requirement for tax purposes and forms part of the UK's tax legislation. The intention of Ofgem is to confirm that transfer pricing requirements are met to improve confidence in the appropriateness of CSS reporting.

Testing transactions between different parts of a business against the arm's length standard - the price that third parties would agree in comparable circumstances - relies on robust comparable data. As discussed in earlier sections, there is often an element of subjectivity to how this data is used, as there may be more than one third party price. These pricing decisions should be clearly supported for them to be robust. Weaker support will lead to a higher level of transfer pricing risk for tax purposes. In the energy market this could also lead to potential weaknesses in the CSS.

Any potential weaknesses should be considered in light of their materiality and the likely impact any adjustment could have on the Statements.

#### SUPPORTING AN ARM'S LENGTH PRICE

#### Use of the energy market price

The price from the wholesale energy market at a given time horizon is key to much of the transfer pricing policy applied by the Big Six. This is considered to be consistent with the business models used.

As the market price is generated by third party buyers and sellers and their transactions, this constitutes a CUP for transfer pricing purposes. Where applied appropriately, this is in line with transfer pricing best practice and consistent with the OECD Guidelines and UK legislation.

Where adjustments are made to the market price to reflect changes in risk or other activities, these adjustments will also need to be consistent with the arm's length standard for the price to remain supportable. There are two models which are considered below:

- Toll generation models, where Trading segments pay a discounted market price for capacity or capability
- Central broker models, where Trading segments receive a broker fee or equivalent

In light of the CMA enquiry into the energy market, it should be noted that if companies' business models change as a result of this enquiry then this change should also be reflected in their related transfer pricing policies.

#### Adjustment to market prices - toll generation models

Under toll generation models, Generation segments sell capacity/capability to Trading. This sale typically takes place at market price over a given time horizon which is adjusted to compensate Trading for its activities and the risk it takes on in assuming and managing the generation hedge.

Some of the Big Six companies operate a similar model with regard to the Supply segment. Trading is again rewarded based on an adjustment to market price.

The result of these policies is to reduce profit shown in the Generation and/or Supply segments of the relevant Statements.

The income of Trading will be increased by these amounts. Whether this translates into additional profit in the Trading segment will depend on how successfully Trading manages those risks and controls its cost base.

Under a central broker model, Generation and Supply segments could be more profitable, but are likely to show greater variation in profit over a number of years.

The approach used is consistent with transfer pricing best practice, which allows a different allocation of risks to be addressed in the pricing policy by adjustment to market prices. However, the levels of adjustments must always be supportable.

The basis of market price as third party comparable data is subject to the caveat that a review of the wider energy market by the CMA has been announced.

Transfer pricing risk in this area is high, as adjustments may depend on a subjective view of risk which must be supported. Support is currently provided by comparable evidence from joint ventures entered into by the Big Six with third parties at arm's length. There is also a high risk for the CSS, as the calculation of adjustments from market price can result in a material movement of cost to outside the CSS.

However, under current arrangements, we understand the transfer pricing policies employed by Big Six companies using this business model reflect the facts and circumstances of activities.

### D: TRANSFER PRICING POLICIES - KEY FEATURES TRANSFER PRICING POLICY

Transfer pricing is a requirement for tax purposes and forms part of the UK's tax legislation. The intention of Ofgem is to confirm that transfer pricing requirements are met to improve confidence in the appropriateness of CSS reporting.

Testing transactions between different parts of a business against the arm's length standard - the price that third parties would agree in comparable circumstances - relies on robust comparable data. As discussed in earlier sections, there is often an element of subjectivity to how this data is used, as there may be more than one third party price. These pricing decisions should be clearly supported for them to be robust. Weaker support will lead to a higher level of transfer pricing risk for tax purposes. In the energy market this could also lead to potential weaknesses in the CSS.

Any potential weaknesses should be considered in light of their materiality and the likely impact any adjustment could have on the Statements.

#### SUPPORTING AN ARM'S LENGTH PRICE

#### Adjustment to market prices - central broker models

Under central broker models Generation and Supply businesses manage their own options and hedging arrangements. Their Trading businesses are rewarded either through broker fees or the payment of costs incurred by the Trading segment in facilitating the market requirements of the other segments.

For transfer pricing purposes, to reward this kind of service activity based on either cost or a suitable CUP such as a broker fee is appropriate and corresponds with best practice. This method is currently used by Big Six businesses operating this model.

For the CSS these payments reduce profit in the reported segments. However, the transfer pricing method is considered lower risk. The amounts involved are a function of the cost of provision rather than trades. As a result, the size of any adjustment that may be required is likely to be correspondingly smaller.

For CSS purposes these charges are considered to be medium risk as there is the potential for leakage of income and profit from the CSS but on a smaller scale than under the toll generation model.

We have found no evidence of undue leakage from the CSS in the course of this review. Central broker models used have charging arrangements either based on third party broker fees or on the underlying cost of service provision.

#### Management and support services

Each of the Big Six performs certain management and support services centrally. This is consistent with their business models as the businesses typically seek to control cost and avoid duplication of functions across business units.

To reflect the limited business risk incorporated in these services, a charge based on cost and incorporating a mark up where the services have been performed within the group and not bought from external providers is considered best practice. Where these costs cannot be charged directly, an appropriate allocation key based on a relevant business measure (for example turnover or headcount) is considered best practice.

A key test applied to these charges is that they provide a proportionate benefit for the recipient. From our discussions with the Big Six this is understood to be the case.

For transfer pricing purposes, the charging of support services around a group is considered low risk where an appropriate cost plus model is followed.

While these charges reduce profit for the segments in the CSS, the amounts involved are comparatively low and are considered to be of a low materiality for the purposes of this review.

This area is considered to be low risk.

### D: TRANSFER PRICING POLICIES - KEY FEATURES TRANSFER PRICING POLICY

Transfer pricing is a requirement for tax purposes and forms part of the UK's tax legislation. The intention of Ofgem is to confirm that transfer pricing requirements are met to improve confidence in the appropriateness of CSS reporting.

Testing transactions between different parts of a business against the arm's length standard - the price that third parties would agree in comparable circumstances - relies on robust comparable data. As discussed in earlier sections, there is often an element of subjectivity to how this data is used, as there may be more than one third party price. These pricing decisions should be clearly supported for them to be robust. Weaker support will lead to a higher level of transfer pricing risk for tax purposes. In the energy market this could also lead to potential weaknesses in the CSS.

Any potential weaknesses should be considered in light of their materiality and the likely impact any adjustment could have on the Statements.

#### HM REVENUE & CUSTOMS ENQUIRY

While this review is not intended to be a tax inquiry into the transfer pricing policies of the Big Six and we have not consulted HMRC directly, conclusions drawn by HMRC are a helpful indicator of the robustness and transparency of a transfer pricing model.

HMRC enquiries into transfer pricing would be expected as a matter of course and are not a definitive sign of transfer pricing risk.

Where a business has no outstanding transfer pricing issues with HMRC, we view this as low risk. The existence of a transfer pricing enquiry (irrespective of the focus of the enquiry) is viewed as a medium level transfer pricing risk. An ongoing challenge to a transfer pricing policy would carry a high level of transfer pricing risk.

As an HMRC challenge would arise from a detailed review and be likely to lead to an adjustment to the pricing policy, this area also carries a high risk for CSS purposes.

### **D: TRANSFER PRICING POLICIES - KEY FEATURES** IMPLEMENTATION

A fundamental part of a robust transfer pricing policy is its effective implementation.

While transfer pricing adjustments may be made retrospectively at year end, it is best practice for transfer pricing policies to be embedded in the day-to-day accounting and management of a business. This supports the consistency between the business model and transfer pricing arrangements as financial data, management objectives and commercial decisions are all on a consistent basis. This may be reviewed in the context of:

- Management reporting practice
- Testing of financial information
- Transfer pricing documentation and support

#### MANAGEMENT REPORTING PRACTICE

Transfer pricing is at its most robust when it is reflected in the management reporting policies of the business. The arm's length standard can be achieved by retrospective adjustment (for example, at the year end) but this is a much less convincing reflection of the business' facts and circumstances.

The main transfer pricing policies - the pricing of fuel and energy - are understood to be closely reflected in the management reporting of the Big Six businesses. This is to be expected as the wholesale energy market is the generator of prices throughout the industry.

Where the transfer pricing policies deviate from the 'screen' price in the energy market (by adjustments to reward Trading or when Generation and Supply requirements are matched) the resulting price remains incorporated directly in management reporting systems.

Other transfer prices, for example for management services, may be charged periodically. Again, however, these are captured for management reporting purposes.

There is risk from not reporting transfer pricing processes directly. As such, in principle this area is considered to carry medium risk.

However, we understand from our review that the Big Six businesses follow best practice in this area in respect of the key material transactions. As such, in practice this area is currently considered to be low risk.

#### **TESTING OF FINANCIAL INFORMATION**

It is a fundamental requirement that transfer pricing policies are implemented appropriately and effectively. This includes accurate invoicing and reporting between the parties.

As for third party transactions, these should be addressed by both internal and external audit procedures. For the key material transactions, this would involve the confirmation that the desired price point is achieved, appropriate adjustments are made or associated fees raised, and that these amounts are booked correctly.

This is considered a high risk area for both transfer pricing and the CSS, as material inaccuracies could impact disclosure by incorrectly attributing income and profit between reported and unreported segments.

In practice, the Big Six operate levels of internal and external audit testing with some focusing procedures specifically on transfer pricing issues.

#### DOCUMENTATION AND SUPPORT

The OECD Guidelines set out documentation requirements for transfer pricing policies as best practice. UK transfer pricing legislation reflects this requirement.

An effective implementation of transfer pricing policies will include putting robust documentation in place. This will be required by the tax authorities and is often beneficial to businesses as it enables their activities to be clearly characterised and their transfer pricing policy supported in advance of any enquiry.

The exception to this is where activities take place within one legal entity, in which case there are no formal intercompany transactions. Instead, transactions between segments are imputed for the purposes of the CSS. Where this arises there is no transfer pricing documentation requirement for tax purposes, however amounts are imputed for CSS reporting.

### **D: TRANSFER PRICING POLICIES - KEY FEATURES** COMPARABILITY

Transfer pricing risk for both tax and CSS transparency purposes may be compared between the Big Six. The nature of the different business models and the application of transfer pricing policies places limits on the effectiveness of comparison between the statements of different companies or between years.

#### Comparability between the Big Six

As discussed, the business models of the Big Six locate certain functions, assets and risks in different segments. The main distinction is between toll generation models and central broker models, where hedging activities and their associated risk are located in either the Trading or Generation segments respectively.

Under each model, it is appropriate for the transfer pricing policy to locate income and cost in a slightly different way.

Entities with lower levels of commercial risk, for example Generation segments in a toll generation model, are expected to be exposed to lower levels of profit volatility as a result. Their profit may not be as great as under a model where that segment is responsible for managing more risk, but profitability is less likely to be as low in bad years - a lower but stable return is expected.

Direct comparison between the segments of different models may therefore be misleading without knowing which model is shown. However, with knowledge of each business model type, potential entrants may be able to assess results and make commercial decisions accordingly.

Appropriate measures of respective performance will also depend on the business model and transfer pricing policy. A return on assets measure might be most appropriate for a toll generator (although the age and value of assets will be an important consideration for comparability), while a return on sales may be a more effective indicator for a generator under a central broker model.

#### Comparability between years

This difference in the expected return of a segment based on the business model also influences how the CSS is viewed over multiple years. It is reasonable to expect more fluctuation in some results than others. Knowledge of the business model will be beneficial in considering these results, as is an awareness of any changes to it over time.

### D: KEY FEATURES CONCLUSIONS

#### SUMMARY

Transfer pricing poses a risk to the CSS as it contains the potential to move income and profit from the reported Generation and Supply segments to the unreported Trading segment or elsewhere.

However, transfer pricing is governed by an established set of guidelines, legislation and best practice. The Big Six, as with other businesses, are constrained by these. Their transfer pricing policies must reflect the arm's length standard, and so must be consistent with the business models they apply and pricing at third party rates and terms.

The current transfer pricing policies of the Big Six are not considered to have a material impact on the effectiveness of the CSS.

Based on our review:

- The business models used by the Big Six appear to be consistent with what third parties would enter into.
- The transfer pricing policies used are based on comparable uncontrolled prices or methods set out by the OECD Guidelines.
- These prices and rationale can generally be evidenced and the Big Six have audit procedures (internal, external or both) to test implementation.
- While there are areas of subjectivity, the Big Six are clear in their intention to meet the arm's length standard.
- Nothing has been identified that is inconsistent with the arm's length standard that would materially impact the CSS.

#### **KEY ISSUES**

The issues primarily driving theoretical transfer pricing risk in the Big Six businesses are:

- The use of a toll generation model by three of the Big Six which pushes income and potentially profit outside the CSS, through the use of discounts and optimisation payments by these companies, which are more subjective and harder to support than charging under a central broker model.
- The third party comparable data used to support the pricing of toll generation models should be kept under regular review to ensure that it remains current and appropriate

- Different levels of matching, which are not consistent between businesses and utilise a different adjustment to the wholesale energy market price which potentially increases income in reported segments.
- The absence of internal audit procedures in several of the Big Six which specifically address transfer pricing.
- Reliance of the main transfer pricing arrangements on energy market prices, which are influenced by the dynamics of competition in the wholesale energy market. This is an area that the CMA is investigating.

Transfer pricing policies should be kept under review, including auditor scrutiny, as the market evolves to ensure they remain appropriate and well implemented. These conclusions should be re-considered in light of the findings of the CMA investigation.

BDO LLP, a UK limited liability partnership registered in England and Wales under number OC305127, is a member of BDO International Limited, a UK company limited by guarantee, and forms part of the international BDO network of independent member firms. A list of members' names is open to inspection at our registered office, 55 Baker Street, London W1U 7EU. BDO LLP is authorised and regulated by the Financial Conduct Authority to conduct investment business.

BDO is the brand name of the BDO network and for each of the BDO Member Firms.

BDO Northern Ireland, a partnership formed in and under the laws of Northern Ireland, is licensed to operate within the international BDO network of independent member firms.

© October 2014 BDO LLP. All rights reserved.