

Can the Imposition of a Regulator in Any Liberalised Energy Market Be Justified by Market Behaviours?

By David O Adetoro*

The provision of electricity and the supply of gas and oil in the energy mix are crucial for economic development and progress. While sectoral performance of the energy industry (especially electricity and gas) traverses economic, political and environmental terrains, thus achieving efficiency, supply security and investment stability, in the light of the liberalisation of the sector in different jurisdictions, have become more important. This article examines the existence and justification for a regulator in liberalised energy economies in the context of real and/or probable restrictive market behaviours and energy policy in both developing economies and economies in transition.

Energy industries in most parts of the world prior to the late 1980s were characterised by state ownership – either statutory monopolies or monopolies with statutory support – and this background influenced and dictated the course of energy policies globally.¹ In fact, during this period, major sectors of the world's economy, particularly in Europe and America, were dominated by state-owned monopolies. For example, the energy sector companies were given exclusive rights by EU Member States to provide electricity and this was justified, by different reasons, including the presence of large economies

* David O Adetoro is a PhD student, University of Glasgow, LLM Energy Law and Policy, CEPMLP, University of Dundee and can be contacted by e-mail at oluwadareadetoro@yahoo.co.uk. The author is grateful to Hadiza S'aid for her valuable comments on the earlier draft of this article.

1 Dieter Helm (ed), *British Energy Policy in The 1990s: The Transition to Competitive Market* (Oxford: Oxford Economic Research Associates, 1996).

of scale, the need to achieve public service objectives such as consumer equality and the strategic importance of the sector.² In particular, it is a common belief that the degree of development of the energy sector of a state is often seen as a measure of the level of development of that state's economy.

However, in the late 1980s, technological progress and the political and economic climate influenced the concept and challenged the reasons for erecting or maintaining the existence of monopolies.³ This necessitated a movement towards more private participation into sectors once dominated by monopolies. Thus, with the shift from the traditional paradigm of 'state backed or statutory monopolies' to the new paradigm via different processes particularly privatisation and liberalisation, it became apparent that the successors to the old paradigm, in addition to inheriting the advantages of its predecessor, must also be ready to carry the burden and problems associated with it.⁴ This is relevant because the arguments and reasons responsible for the shift constitute the core of the problems and the advantages derivable from an efficient resolution-management of incidental issues in contention. A common feature to most privatised or liberalised utility sectors and, especially the energy sector, is the creation or 'imposition' of a regulatory body charged with different responsibilities and state policy directives, among which is to take action to promote competition. The word 'imposition' is used because investors in a liberalised industry would argue that market forces alone should be the invisible hand that ought to guide the markets. Therefore, this article attempts to answer the question whether the 'imposition' of a regulator in a competitive market could be reasonably justified. This is in view of the fact that the whole idea of a competitive market is to leave the market involved to the dictates of supply and demand rather than to the influence of a visible hand. The former is generally assumed to be faceless and objective, while the latter is assumed to be known and subject to human fallibility.

As a result, the article discusses the link between the principles involved in liberalisation of the energy sector and the basis for the imposition of a regulator for the sector. The identification of this nexus is important because it is what will put into focus the problems and duties the regulator is expected to deal with and perform respectively. This is followed by an analysis of

2 Damien Geradin, *The Liberalisation of State Monopolies in the European Union and Beyond* (ed, 2000), p ix.

3 *Ibid.*

4 P D Cameron, *Competition in Energy Markets – Law and Regulation in the European Union* (Oxford: Oxford University Press, 2002), p 32.

important market behaviours that cannot be overlooked in a liberalised market without interference from the government, despite changes in the ownership and structure of the sector.⁵ The article will focus more on the electricity and gas industries because the oil market is global and has become competitive in the energy mix.⁶ Also, because the oil sector is not network based and the global oil market is characterised by price transparency, global integration of markets, multiple operators, ample supply and different ways of transporting production, most of the problems associated with the electricity and gas sub-sectors are absent in the oil sub-sector.⁷ The third section of the article will consider some possible regulatory scenarios and suggestions for reforms. In the conclusion an attempt will be made to answer the question posed by this article.

Issues in energy sector liberalisation

Privatisation can be said to be the transfer or sale of state-owned companies to the private sector.⁸ This primarily involves the transfer of assets from public to private hands resulting in private ownership and management. Liberalisation, on the other hand, is the introduction of competition and profit-oriented disciplines into the sector dominated by state monopolies.⁹

The competition envisaged involves the introduction of new entrants into the sector, improvement in the quality, standard and quantity of product delivery and price reduction for consumers, which are believed achievable, if and when, both productive and allocative efficiency is attained under the new liberalised regime.¹⁰ In general terms, the objective of privatisation and liberalisation 'is to install a structure of ownership and control including decentralization of performance, of which, in relation to general public's welfare, is to be evaluated in terms of a dual price and quality criterion'.¹¹

5 For further details and arguments about the organisation of the liberalised market, see McCehary *et al*, *International Regulatory Competition and Co-ordination – Perspective on Economic Regulation in Europe and the US* (1996). See also *Journal of International Economic Law*, vol 13, 2000.

6 *Ibid*, at 293.

7 *Ibid*.

8 Sally Hunt and Graham Shuttleworth, *Competition and Choice in Electricity* (3rd edn, 1996).

9 Cento Veljanovski, *Privatisation – Monopoly Money or Competition in Privatisation and Competition: A Market Perspectives* (Cento Veljanovski *et al*, ed, 1989), p 1.

10 International Chamber of Commerce, *Energy Sector Liberalisation Boosts Economic Benefits*, www.iccbo.org/home/news_archives//1998/energy_sector_liberalisation.asp-vision (last visited 2 June 2005).

11 Michael Kaczynski, 'Privatizing Energy – An Overview' in *Privatisation and Deregulation in the Gulf Energy Sector* (1999), p 11.

However, the liberalisation of an industry, especially a utility and network-bound industry, involves a process that commences with the lifting of the monopoly rights of the incumbent operators.¹² Prior to direct private participation in this sector, it is typical for it to be subjected to some degree of formal control via a regulatory body. But the presence of the regulator has not gone away and this is contrary to the argument that the market is best left alone to self-heal rather than being tied to the apron of the state. Consequently, attempts to justify or defend either of the positions might tend to consider some questions that could be summarised as follows:

- What makes the energy sector different from other sectors?
- What are the market behaviours inimical to a liberalised market?
- How compatible is the role of a regulator with market discipline in an energy sector?
- How far should regulation go?
- What is the social cost of the new regime?
- Would liberalisation further sustainable development in the economy concerned?

What makes the energy sector different from other sectors?

In addressing the first question, this article seeks to highlight the characteristics of the energy sector. The sector covers the primary sources of energy, namely hydro, coal, oil, natural gas, nuclear and renewable, while electricity is included as a secondary source. There is a complex relationship involving the direct competition of some primary sources with electricity from a demand perspective.¹³ Oil remains the major primary energy source. Although coal is also traded on a global basis, its market share has declined considerably and its retention in the energy mix is often as a result of a policy objective to avoid a single source energy market and implication for security of supply.¹⁴ The emergence of gas in the energy mix and its increasing market share are attributable to its strong and favourable environmental characteristics such that it is being consumed faster than any other fuel, especially within the European Union.¹⁵

Furthermore, it is trite that energy is vital as a basic requirement of a civilised society along with food, shelter, clothing and water, but energy has

12 Geradin, n 2 above.

13 *Ibid.* See also article contained in the same book by, Piet Jen Slot, 'Energy, Electricity and Natural Gas,' at 50.

14 The UK is a case in point. See also the UK White Paper of 2003 on the promotion of renewables.

15 Beeto and Laffont, *op cit*, at 5.

risen in importance because unlike other vital necessities of life, sources of energy are homogenous in nature.¹⁶ Gas could not easily be substituted and there is only a limited degree of possibility of substitution for other energy sources. Therefore, every reasonable government will be concerned with access to an affordable and reliable supply of energy or fuel, which arguably they would not want to be solely dependent on market forces, that is other considerations along with market forces might be employed to influence price determination. Nevertheless, this often would not be done directly but will most likely come through policy directives. These directives then have an impact on business and the business environment and then a further manifestation in pricing outcomes. This is obviously a primary social obligation and regulation is often the tool a government will employ to carry it out.

Further, energy involves activities that develop in successive phases, for instance, from generation to transmission, distribution and supply/retailing.¹⁷ There are elements of a natural monopoly in these phases, particularly in transmission and distribution activities, which lead to vertical integration of the activities within a single firm. Generally, firms or companies were initially encouraged to invest and expected to provide and supply electricity and gas in return for a grant of exclusive rights of supply over a specific market. Governments have had to impose this obligation on the companies with an exclusive right to supply in return. A popular argument or explanation in defence of this is the need to meet some of the different social obligations of government, for example, subsidised electricity supply for particular cross-sections of society (this is derisively dubbed the 'freezing grannies' argument in the United Kingdom).

Another important characteristic of the energy sector is that in many parts it is dominated by political influences, which occur at national, local and provincial levels.¹⁸ For example, in countries such as China, many energy companies are owned by provincial or local authorities, which have sufficient political clout and influence to affect their operation. In fact, in some countries, the production, transmission and distribution of electricity and, to some extent, natural gas, are often controlled by cities and provinces, therefore making the reorganisation of the sector difficult. Difficulties and controversies involved often include issues such as network access and

16 Ann Scully, 'The Consumers' Point of View' in Dieter Helm (ed), *British Energy Policy in the 1990s: The Transition to the Competitive Market* (Oxford: Oxaera Press, 1996), p 78.

17 Cameron, n 4 above, at 5.

18 'Introducing Competition in Power Generation in the Peoples Republic of China: The Case of Guangdong Province' (2001), *CEPMLP Journal* CP 3/01, 2001, pp 30 and 41.

unbundling. These plagued the process of energy liberalisation within the European Union before the adoption and implementation of the Electricity and Gas Directives.¹⁹

The energy sector is also different from other economic sectors such as the manufacturing or agricultural sector because energy is strategic for overall economic growth and development as well as for social progress and the military capability of any state, although the major factors in determining efficiency performance in the sector are power tariff and structure. When these factors are not properly in place or absent it may result in a situation whereby the financial costs of the system are not being covered. If that results, then problems such as systemic failure or excess investment occur; therefore price reforms along with other structural reforms will become inevitable.²⁰ These reforms are initiated either through privatisation or liberalisation.

In addition, the energy sector comprises highly capital-intensive companies with a high degree of complex technology, thus creating a form of integration and entry barriers to the sector. For instance, in the past, the installation of power plants of a minimum efficiency scale of 500MW required a very long lead-time. The availability of funds did not guarantee a ready-made power plant and an allowance had to be made for it to be designed, installed and commissioned.

However, with advances in technology, the optimal scale for power plants has been reduced from 900MW in the 1980s to 100MW in the 1990s.²¹

Consequently, these characteristics have been influencing the regulatory environment of the energy sector, but other problems or market behaviours incidental to these characteristics have largely contributed to the importance and role of regulatory agencies in the energy sector. These other problems or behaviours are likely significantly to change the competitive dynamics of any particular liberalised energy sector. These shall be expatiated on shortly, although different commentators have expressed different concerns, criticisms and/or arrived at various conclusions on whether the introduction of an energy sector regulation is likely significantly to change the competitive dynamics of any particular liberalised energy sector.²²

19 Michael Albers, 'Competition Law Issues arises from the Liberalisation of Electricity and Natural Gas in the EU' in Geradin (ed), at 3.

20 De Oliveira and Mackerron, 'Is the World Bank Approach to Structural Reform Supported by Experience of Electricity Privatisation, in the UK?' (1992) 20 *Energy Policy* 153-156.

21 Piet Jen Slot, at 52.

22 Enese Lieb-Doczy *et al*, 'Introducing Energy Sector Regulation in Germany: A Significant Step Forward or on the Death Knell for Competition,' *Global Energy Review* (2003) available also in the Conference Proceedings: Government Intervention in Energy Markets, Biennial Conference of the British Institute of Energy Economics (BIEE) 2003.

Nevertheless, both the criticisms and the arguments have always fitted into either the argument of the Harvard or the Chicago school of economics.²³

The Harvard position, often called the 'structured-conduct-performance' paradigm, is that the structure of the market determines the conduct of the firms and that this conduct determines market performance, including profitability, efficiency, technical progress and growth.²⁴

Although this theory was developed through empirical studies of American industries, it can reasonably be adopted for other economies. Its conclusion was that market structure dictated performance and therefore provoked a belief that competition policy or antitrust²⁵ should be concerned with structural rather than behavioural remedies.

However, the Chicago school postulated that the pursuit of allocated efficiency as defined by the market should be the sole goal of the antitrust. The school has no sympathy for small businesses. To the Chicago advocates, the identity of the winners or the losers is irrelevant as long as efficiency is achieved. The theory demonstrates considerable faith in the ability of the market to self-heal and corrects any distortions in order to achieve efficiency without outside or governmental intervention.

However, this article argues in support of the view that it is difficult to build a sustainable economic policy on the efficiency foundation as the sole or legitimate goal of competition policy.²⁶

While social policy objectives such as public service obligations and distributive goals are equally important, the prevailing view is that maximisation of consumer welfare or economic efficiency should be the primary goal of competition policy.²⁷

23 A Jones and B Sufirin, *EC Competition Law, Texts, Cases and Materials* (Oxford: Oxford University Press, 2001), p 19.

24 *Ibid*, at 1.

25 Competition policy is synonymous for antitrust, the former is commonly use in contemporary Europe while the latter word is the preferred choice of term in the US. According to Sullivan and Harrison, competition can be defined as 'a body of law that seeks to assure competitive markets through the interaction of sellers and buyers in the dynamic process of exchange': E T Sullivan and J L Harrison, *Understanding Antitrust and Its Economic Implications* (Newark: Matthew Bender & Co Inc, Lexis Nexis Group, 2003), p 1. Motta defines competition policy as 'the set of policies and laws which ensure that competition in the marketplace is not restricted in a way that is detrimental to the society': M Motta, *Competition Policy: Theory and Practice* (Cambridge: Cambridge University Press, 2004), p 30.

26 See R Bork, *The Antitrust Paradox: A Policy at War with Itself* (New York: Basic Books, 1978, reprinted with a new Introduction and Epilogue, 1993). The gravamen of Bork's book or argument is that maximisation of consumer welfare or economic efficiency underscores competition policy and everything incidental to it.

27 Bork, *The Antitrust Paradox*, at 427.

What are the markets behaviours inimical to a liberalised market?

It has been argued that introduction of competition law into a system is meant to guarantee commercial transactions or intercourse within the market without any form of distortion or hindrance.²⁸ This implies that there are behaviours or practice that could make the market unable to deliver an optimum result or satisfy the expectations of the policy makers, in the sense that the objectives of the competition policy might not be met or fully realised. The primary objective of competition policy, it has been argued, is economic welfare, which is an aggregate of consumer welfare and producer welfare. There are other objectives, but the discussion of their relevance is outside the scope of this article. However, the author just wants to point out that a fear of possible failure to realise these objectives or failure to realise them, particularly in economic welfare, underlines the importance of a further provision for a regulatory body to complement competition law or the workings of a liberalised energy sector. Generally, behaviours that are inimical to the efficient working of a market include collusion among producers or sellers, abuse of a dominant position by a firm or a producer, predation and monopolisation. The practical representation of these is that it will result in unfair or higher prices, poor product quality and a general distortion of the economy as a result of a possible multiplier effect²⁹ of any of the behaviours on the economy.

How compatible is the role of a regulator with market discipline in an energy sector?

It is important to define at this juncture what regulation entails or who a regulator is and its function before analysing its compatibility with market discipline in a liberalised sector. Regulation does not lend itself to a single definition and it has been defined in different ways,³⁰ which of course satisfy

28 M Motta, *Competition Policy: Theory and Practice* (Cambridge: Cambridge University Press, 2004), p 31.

29 The equilibrium state of an economy is dependent on the balance between injections and withdrawals. This is a factor of the investment, household disposable income and propensity to consume/invest. Any distortion of the balance could possibly have either a larger negative or larger positive effect on the whole economy, although this would be a cumulative effect, and is often called a multiplier effect. For example, an initial increase in aggregate demand of £xm leads to an eventual rise in national income that is greater than £xm. Similarly, any anti-competitive behaviour that diminishes the benefits accruable to consumers through price abuses would eventually affect the whole economy in a much larger measure. See generally J Sloman and M Sutcliffe, *Economics for Business* (3rd edn, Essex: Pearson Education Limited, 2004), p 265.

30 R Baldwin and M Cave, *Understanding Regulation: Theory, Strategy and Practice* (Oxford: Oxford University Press, 1999), p 2.

the purposes and requirements of the industries involved. However, for flexibility and ease of adaptation, it has been suggested that it is useful to consider the word 'regulation' in four different ways as follows:

- (1) as a specific set of commands;
- (2) as deliberate state influence;
- (3) as all forms of social control and influence; and
- (4) as an activity that restricts behaviours and prevents the occurrence of certain undesirable activities. It may also be to provide an enabling environment or to facilitate certain activities.³¹

Nevertheless, it is in the fourth sense above that regulation is more important in this article. This is because of the likely behaviours of the incumbent undertakings in a liberalised sector, the possibility of collusion among all the current firms and the need to protect and possibly shield the industry from aggressive expansionist moves or competition from foreign firms with more economic power. The last point identified is more of an industrial policy usually raised to protect or in defence of local industry from foreign firms who may either resort to dumping or predatory in order to penetrate or gain dominance in a newly liberalised market. This has become a controversial goal of competition law because some writers have argued that industrial measures in defence of local industries depend very much on the type of strategy employed. Baldwin and Cave have argued that a regulatory system would be difficult to defend or justify if it can be shown that other alternative strategies could effectively be used to achieve similar results.³² Therefore, choice of strategy is a key process in the formulation and establishment of any regulatory system; this is usually predicated on the basic capacities or resources available to a government.³³ Thus, different regulatory strategies have been established or founded on these capacities or resources. They include command and control, self-regulation and self-enforced self-regulation, incentive-based regulation, market harnessing controls, disclosure regulation, direct action, rights and liabilities, and public compensation/social insurance schemes.³⁴

Furthermore, of serious importance to the success of regulation is the choice of who or which body is saddled with the regulatory burden. These comprise self-regulators, local authorities, parliament, technocrats, government departments, courts and regulatory bodies established

³¹ *Ibid.*

³² Baldwin and Cave, *Understanding Regulation*, at 35.

³³ *Ibid.*

³⁴ *Ibid.*

specifically for that purpose. But the basic understanding here is that the choice is largely dependent on government's discretion or decision.³⁵

Generally, energy sector liberalisation is carried out with an understanding of the concerns of the current undertakings and customers as well as a vision for future participants in the markets, thus it has been argued that regulation of an energy sector is meant to ensure provision of optimum service and price administration for the interest of both current and future participants in the market.³⁶ The ideal vision of a liberalised energy sector envisages a competitive market structure devoid of distortions and where consumer welfare is guaranteed or 'aimed at'. The product pricing hallmark of such a competitive market that normally comes to one's mind is perfect competition, where price is equal to marginal cost. This economic model is based on a number of assumptions, among which are the presence of a large number of sellers and buyers, freedom of entry and exit from the market and perfect information about the condition of the market (accessible to all parties).³⁷ This means that no single seller or buyer can independently influence the market, thus in particular sellers or producers in this market are referred to as price takers rather than price makers.³⁸

Monopoly elements in the industry

The fourth and fifth questions posed at the start of this article are addressed in this section. Ordinary privatisation or liberalisation of the energy industry would not change the structural elements of the sector without appropriate steps/legislative action to effect the necessary changes. This is because society provides the context within which regulation takes place.³⁹ According to Robinson, 'it was not sufficient to establish rivalrous markets ... once entry became possible the way was open for ingenious to move into the market'.⁴⁰ He argued that further steps would still need to be taken to avoid distortions or what he called emergence of 'a Schumpeterian gale of creative destruction'.⁴¹

35 C Graham and T Prosser, *Privatising Public Enterprises: Constitutions, the State and Regulation in Comparative Perspective* (Oxford: Clarendon Press, 1991), p 190.

36 Eneise Lieb-Doczy, 'Introducing energy sector regulation in Germany: A significant step forward or a death knell for competition?' www.hhlaw.com/articles/762_2003NERA.pdf, accessed on 12 July 2005.

37 Sufrin and Jones, *EC Competition Law*, at 8.

38 *Ibid.*

39 D Helm and G Yarrow, 'Regulation and Utilities' (1988) 4 *Oxford Review of Economic Policy* vii.

40 Col Robinson, *Regulation as a Means of Introducing Competition* (Guildford: University of Surrey and Institute of Economic Affairs, 1995), p 17.

41 *Ibid.*

The energy industry, in particular the electricity and gas sectors, has been structured in most economies in such a way that it gives significant or dominant market power to single/few producers. This implies limited choice for consumers and a strong case for the development of regulatory mechanisms. Thus, for market reform with any meaningful impact, restructuring must be seen as the most critical component of the programme.

In electricity, for instance, the natural monopoly elements in transmission and distribution networks present a daunting task to both policy makers and investors.

This is because of the potential competition issues that are generated especially, on account of network access. The process of delivery of electricity to consumers effected through the grid, linking the upstream supply with downstream consumers underscores this point.⁴² The grid network is expensive to establish and embodies substantial fixed costs that determine economies of scale within the capacity of a network. This is a classical feature of a natural monopoly and makes the duplication of networks highly uneconomical.⁴³ From the EU competition perspective, a transmission system operator (TSO) enjoys a dominant position within the provisions of Article 82 of the EC Treaty within the geographical area covered by the grid.⁴⁴

Therefore, electricity supplies must be provided with non-discriminatory access to the grid at fair prices in order to be able to compete effectively for customers.

However, before the major competition issues are dealt with, it is important to dwell briefly on the other aspects of the monopoly network issues, ie the presence and importance of vertical integration in the energy industries.

Advocates of the old model in the energy sector, particularly in the electricity sector, have always argued that the presence of vertical integration in the sector could be justified because electricity is different from other forms of energy. This is because it cannot be stored; rather it has to be consumed at the instant of production.⁴⁵

This element has always influenced the market structure for electricity. In the European Union, because of network issues, in particular in the vertical integration of power generation with grid operators in the electricity sector, it has become difficult to establish a truly competitive market for the

42 Michael Albers, *Liberalisation of Electricity and Natural Gas in the EU*, p 4.

43 European Economy, *Liberalisation of Network Industries* in 4 European Commission (EC, ed, 1999), p 21.

44 The Treaty on the European Union signed in Maastricht in February 1992, which came into force on 18 November 1993: www.europa.eu.int/abc/treaties_an.htm/ (last visited on 2 June 2004).

45 Cento Veljanovski, n 9 above.

transmission of electricity. Rather, national champions have been promoted and the field is seen as 'un-levelled'.⁴⁶

Though liberalisation calls for the evolution of transmission services and pricing, the pricing must not be unfair or predatory and must be placed within a defined regulatory framework.

However, EU competition law does not prescribe a particular method for determination of the prices. Again, most other energy sectors do not have a developed competition law or policy. Nigeria, for instance, has no competition policy in place, although the country is aggressively pursuing privatisation and liberalisation in most sectors of its economy. A robust competition policy is crucial in this country in order to give full rein to market discipline to dictate and enhance the development of the sectors concerned. Without this, this writer would like to argue that the initial excitement or choice of products for consumers might later translate into a big economic burden for them via excessive pricing and poor product quality. This is because the absence of either a competent regulator or an enabling competition law could give the market players an incentive to act in a monopolistic way.

Network access

Electricity and gas are network-bound markets through vertical integration. This confers undue advantages on the incumbent owners or operators. Thus, to create a level playing field for new entrants and also to provide choice for consumers, third party access to the grid may either be negotiated, regulated or conform to the single buyer variant.⁴⁷ The presumption here is that this will lead to more stable markets since the market power of the incumbent would be reduced in conformity with competition law and the concept of abuse of a dominant position. However, whatever the form of access adopted, it has not always been easy to achieve. For instance, the German energy sector offers an example of a liberalisation process where market concentration has increased significantly without the successful entrance of any new participants into electricity retail or generation and wholesale or retail in gas activities.⁴⁸

The situation in the German electricity market has been explained on the basis of its high degree of vertical integration, the absence of a sector regulator as well as reliance on voluntary self-regulation through the Association

46 D Ross, 'How Level is the Energy Playing Field?' (2002) 8 *Energy Policy* 717.

47 *Ibid.* Consider the case of Electricity De France in the UK and Italy electricity markets.

48 D Doczy *et al*, *op cit*, at 21.

Agreement (*Verbandvereinberingen*) and on regulation by case law established by the Federal Cartel Office (Bundeskartellemi).⁴⁹

Since the new operators need access to the networks and there is a high probability of incumbents using this asset defensively, then this kind of abusive behaviour must be adequately taken care of in any liberalisation programmes through the imposition or creation of non-discriminatory 'third party access obligations on the network operators'.⁵⁰

In addition, other various solutions have been designed to take care of this problem, which involves a form of vertical separation of activities known as 'unbundling,' primarily aimed at eliminating incentives or the potential for discrimination against competitors by means of vertically integrated companies.⁵¹ This may take one of three forms: full structural separation by law, functional separation or separation for accounting purposes. It is not impossible to have a combination of two or more of the three forms depending on the circumstances.

National interests

The question why should monopolies be regulated differently from other business will continue to be relevant in any liberalisation programme. It has often been said that the reason lies in the distinctiveness of the utility industries themselves and the nature of public concern about them.⁵² Public concern here involves the issue of competition and broader issue of universal service, which are not relevant in normal competitive markets. While competition law will tackle the first issue, the latter could only be tackled by regulation; because of the nature of these features, competition law may not be sufficient to deal with at least during the initial transition stage from the monopoly setting to the liberalised regime.⁵³ While it is a known fact that this market regime is imperfect, there remains the need to accommodate governmental policy such as the promotion of renewables and diversity of fuel sources. This creates tension among the interests of the various stakeholders in the energy sector. It is common knowledge in the United

49 In Germany, before Directives 2003/54/EC and 2003/55/EC for electricity and gas respectively, the electricity sector was self-regulated through reliance on both Association Agreements (*Verbandvereinbarungen*) and on regulation by case law established by the Federal Cartel Office (Bundeskartellamt).

50 Cameron, n 4 above.

51 David Somer, 'A Stakeholder Approach to Regulation' in Dieter Helm (ed), *British Utility Regulation – Principles, Experience and Reform*.

52 *Ibid*, at 112.

53 Ross, n 46 above.

Kingdom that issues like this that feast on public passion and apprehension could be the swing votes in an election.

The stakeholders include government, labour, consumers, shareholders, utility managers, supplier companies and the regulators. Apart from the government, each of the remaining six stakeholder groups has legitimate expectations that government and its regulators should not act perversely against their respective interests.⁵⁴ The gravamen of this issue is not just getting a balance between the interests of the stakeholder groups but that their interests should be based on the fulfilment of wider national interests such as energy conservation and the international competitiveness of the national energy industry concerned. This approach will necessarily require the governments concerned to develop sectoral industrial policies for energy, transport, commission, etc, within a coordinated regulatory framework without distorting the operation of market forces.

Introduction of competition

The introduction of competition into any energy sector is not enough to guarantee free entry or access into the markets for new entrants and consumers as well.

Further, maximisation of consumer welfare in a liberalised sector is not automatic. Producers are wont to maximise their profits and given the chance; they would do it without much consideration for the consumers. Thus there is a popular view that there is the possibility of collusion by incumbent operators that could lead to economic imbalances, particularly regulatory failure and diminution of the welfare of the consumers via charging of excessive prices, low product quality output control price discrimination and predatory pricing.

Generally, these failings or inadequacy of introduction of competition to self-regulate liberalised markets through the forces of demand and supply have been termed 'market failure'.

However, the same reasons that account for market failure could be used to justify the introduction of a regulator in a liberalised energy sector, especially in a developing country such as Nigeria.

The first reason is the problem of informational monopoly or information asymmetry. This problem relates to availability of data, statistics and records usually within the control of the regulated industry. These will be needed by the regulatory body to make informed decisions about the industry. Without access to information about the amount of revenues, capital flow, the demand pattern of consumers and yardsticks employed by the regulated industry for

⁵⁴ *Ibid.*

its business strategy, then regulation cannot be effective and whatever policy or decision made on the basis of an incomplete record will further distort the industry and may lead to an economic imbalance in favour of the producer. Obviously this is not the desire of any competition regime, especially in a liberalised sector; rather the maximisation of consumer welfare is the primary goal.

In a real sense, policy makers in the energy industries have two monopolies to contend with: a monopoly in the supply of the product and a monopoly in the supply of information. These are sufficient obstacles that may distort the efficiency of any liberalised market. With imperfect information, policy formulation is at best based on guesswork and this would provide fertile ground for collusion in the market to the detriment of consumers but with appropriate unbundling process, this difficulty might be well resolved. Consequently, it has been asked whether the world's electricity supply industries are falling into oligopoly.⁵⁵

The second reason for regulation borders on the issue of incentives.⁵⁶ It has been argued that state ownership and regulation condone inefficiency because of reasons relating to politics and industrial policy.⁵⁷ For instance, regulators of state-owned industries are easily susceptible or amenable to the influence of their state governments, but this scenario could not be expected to disappear just because of a change in ownership. Thus, sectoral regulation will continue to be employed in a liberalised energy sector.

Furthermore, another reason for the imposition of a regulator in a liberalised sector relates to politics. The energy sector, particularly the electricity sector, is an important sector that concerns not just the productive sector of an economy but has a direct impact on the welfare and standard of living of citizens. The implication of this is that the sector affects the political scene and the acceptance or disapproval of the policy framework can affect the political fortunes of the government of the day.

However, enforcing competition rules or policies in the liberalised energy sector therefore demand that competition rules are complemented by sectoral regulations, which would see to the prevention of arrangement or behaviours that limit or prevent competition.

55 Steve Thomas, 'The Seven Brothers – Are the World's Electricity Supply Industries Falling into Oligopoly?' in 'Conference Proceedings of the British Institute of Energy Economics: Government Intervention in Energy Markets' (2003).

56 Paul Cook *et al*, *Competition, Regulation and Regulatory Governance in Developing Countries: An Overview of the Research Issues* (Centre on Regulation and Competition, IDPM, University of Manchester, UK, 2003), p 9. www.competition-regulation.org.uk/downloads/cooketal.pdf, accessed 11 July 2005.

57 *Ibid*.

Probable regulatory scenarios

Regulation of monopoly and liberalised monopoly utilities (even in transmission) poses generic problems that could result from all forms of artificial control, especially governmental interventions in marketplaces, which could mar or enhance the regulatory objectives envisaged.⁵⁸ It has been argued that these could be categorised simply as regulatory failure; the development that Lieb-Doczy envisages can lead to three probable regulatory scenarios. This was based on German experience.⁵⁹ The scenarios are as follows:

- (1) The first scenario is called the 'toothless tiger'. This depicts the case of a compromised regulator devoid of sufficient authority and competence. The resultant effect of this is that the regulator would be unable to offer adequate protection to consumers against the probable abuses of market power by the firms in the industry. This is more probable in a liberalised environment, if the regulator has been captured by the industry, then the dominant firms might want to imitate a monopoly via either an output restriction or price administration. Thus, the consent or approval of the regulator where necessary would become a mere formality and in essence could be taken for granted.⁶⁰
- (2) The second scenario is called the 'elephant-in-a-china-shop'. In this case the regulator takes the interests of consumers very seriously but at the expense of the industry. The regulator here becomes actively pro-consumer to the extent that the investment of the firms in the industry is jeopardised. This could be the case for a regulatory body that is bent on achieving quick results or benefits for the consumers. At times political consideration could have influenced this type of action. A government that wants to deliver on its electoral promise could exert some influence on the regulatory body that will translate to this scenario. In addition, this scenario could arise because of inexperience or where the regulatory body assumes that firms in the industry are lying about their costs and the regulatory authority resorts to benchmarking for tariff-setting purposes.⁶¹

58 Helm, *British Energy Policy in The 1990s: The Transition to the Competitive Market*, n 1 above, at 68.

59 Lieb-Doczy, 'Energy sector regulation in Germany,' at 3.

60 *Ibid*, in this situation in the case of Germany, the process of the Association Agreements will continue and the regulator authority will be only a rubber stamp to any agreement concluded.

61 *Ibid*, at 3.

- (3) The third scenario is the ‘economically efficient regulator’ – obviously the ideal vision. In this case the regulatory body is able to balance the interests of both current and future customers with the expectations of the industry, particularly the prospect of earning a profitable return on investment.⁶² This type of regulator must be transparent, robust and objective as well as operate in a legally defined, consistent and disciplined environment, which will serve as a foundation for an economically efficient behavioural regulation.

Reform issues

While in some jurisdictions it has been formally accepted that regulation is part of the framework of a market system, this should not be subject to much argument because in all institutions the government has always been involved, though informally, in the regulation of utilities – therefore transfer of ownership would not necessarily lead to full transfer of control to private ownership. Rather, regulation would continue to be a matter of degree as to how far it should be accommodated in order to meet certain objectives.⁶³

These objectives have earlier been pointed out to include limiting exploitation of monopoly power or abuse of the market powers of the undertakings involved in the industry and recognition of the role of the utilities in providing basic necessities of life as well as core costs of the industry and efficiency.

But the regulatory designs in most cases, for example in the United Kingdom, have been accused of allowing the energy utilities to make abnormal profits via the RPI-X regime employed.

Again, it has often been argued that regulation is meant to provide ‘jobs for the boys,’⁶⁴ that is, the unsatisfactory concentration of regulatory power in a single unelected and unaccountable person. The fears here are about transparency and accountability, because appointments into regulatory bodies are likely to be influenced by political consideration rather than pure merit.

This argument is rather too simplistic, based as it is on the critical role of regulatory agencies. However, reforms to reduce the level of discretion and improve the accountability, efficiency and stability of regulatory agency should be advocated so that their role as well as regulatory objectives will be equitable and meet the aspirations of both consumers and regulators.

⁶² *Ibid.*

⁶³ Helm, *British Utility Regulation*, n 51 above, at 151.

⁶⁴ The selective use of this phrase is a political catch phrase meant to indicate political patronage or political favouritism.

Some of the likely areas for reform could include designing dynamic energy policy. For instance, an electricity sub-sector reform policy called the National Electric Power Policy (NEPP)⁶⁵ was drafted in Nigeria in 2000, but this was only given legal backing this year with the passage of the Electric Power Sector Reform Act (EPSRA).⁶⁶ This Act provides for the specific legal and regulatory framework within which reform of the sector would be carried out, resulting in improved cooperation between the office of the regulator and the competition authority and the introduction of fair incentive regulation.

Conclusion

So far it is agreed that there is no perfect market competition anywhere, therefore, it might not be unusual for a liberalised energy market not to be perfect but all factors of market competition as well as limits of competition law would exist in it. But it is unlikely that any government would permit or allow market forces alone to dictate the direction of its energy markets, particularly because of the strategic importance of the sector.

Finally, in its attempt to satisfy its corporate responsibilities, achieve a balance of interests of stakeholder groups in an imperfect market as well as to maintain a level of control in the liberalised sector, the continued presence or imposition of a regulator outwith direct government ownership of the industries would be likely to continue to be deemed politically expedient and appropriate by the government and the consumer but this article suggests that while having a sectoral competition authority to supervise or work along the energy regulation agency, there should be a further safety valve in the guise of a general competition authority to supervise both the regulatory authority and the sector competition law authority. The essence of this is that the general competition authority (to be superimposed on all utility sectors) would be less prone to regulatory capture being responsible for all the utility sectors and also aware of the power of public concern and opinion which could be heated when it relates to the whole economy and not just a particular sector.

65 National Electricity Policy, Nigeria, www.bpeng.org/CGI-BIN/cms/sectors/infrastructureandNetwork/Power/PowerPolicy/Electricity (accessed 13 July 2005).

66 Electric Power Sector Reform Act 2005.

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