



European
University
Institute

Robert Schuman Centre for Advanced Studies

EUI Working Papers

RSCAS 2007/06

FLORENCE SCHOOL OF REGULATION

Electricity Generation Capacity Tenders
in the Security of Supply Interest:
It's All Wrong, but It's All Right

Henrik Bjørnebye

EUROPEAN UNIVERSITY INSTITUTE, FLORENCE
ROBERT SCHUMAN CENTRE FOR ADVANCED STUDIES
FLORENCE SCHOOL OF REGULATION

***Electricity Generation Capacity Tenders in the Security of Supply Interest:
It's All Wrong, but It's All Right***

HENRIK BJØRNEBYE

EUI Working Paper **RSCAS** No. 2007/06
BADIA FIESOLANA, SAN DOMENICO DI FIESOLE (FI)

© 2007 Henrik Bjørnebye

This text may be downloaded only for personal research purposes. Additional reproduction for other purposes, whether in hard copies or electronically, requires the consent of the author(s), editor(s).

Requests should be addressed directly to the author(s).

If cited or quoted, reference should be made to the full name of the author(s), editor(s), the title, the working paper, or other series, the year and the publisher.

The author(s)/editor(s) should inform the Robert Schuman Centre for Advanced Studies at the EUI if the paper will be published elsewhere and also take responsibility for any consequential obligation(s).

ISSN 1028-3625

Printed in Italy
European University Institute
Badia Fiesolana
I – 50016 San Domenico di Fiesole (FI)
Italy
<http://www.eui.eu/RSCAS/Publications/>
<http://cadmus.eui.eu>

Robert Schuman Centre for Advanced Studies

The Robert Schuman Centre for Advanced Studies (RSCAS), directed by Stefano Bartolini since September 2006, is home to a large post-doctoral programme. Created in 1992, it aims to develop inter-disciplinary and comparative research and to promote work on the major issues facing the process of integration and European society.

The Centre hosts major research programmes and projects, and a range of working groups and ad hoc initiatives. The research agenda is organised around a set of core themes and is continuously evolving, reflecting the changing agenda of European integration and the expanding membership of the European Union.

Details of this and the other research of the Centre can be found on:

<http://www.eui.eu/RSCAS/Research/>

Research publications take the form of Working Papers, Policy Papers, Distinguished Lectures and books. Most of these are also available on the RSCAS website:

<http://www.eui.eu/RSCAS/Publications/>

The EUI and the RSCAS are not responsible for the opinion expressed by the author(s).

Florence School of Regulation

The Florence School of Regulation (FSR) is a partnership between the RSCAS at the EUI and the Council of the European Energy Regulators (CEER), and it works closely with the European Commission. The Florence School of Regulation is sponsored by leading European energy companies.

The objectives of the FSR are to promote informed discussion of key issues; to provide state-of-the-art training for practitioners; and to produce analytical studies in the field of regulation. It is a European forum dedicated to economic regulation. While its primary focus is on energy regulation, particularly in the electricity and gas markets, it is extending its coverage to other areas of regulation.

This series of working papers aims at disseminating the work of scholars and practitioners on current regulatory issues.

For further information

Florence School of Regulation

Robert Schuman Centre for Advanced Studies

European University Institute

Via delle Fontanelle, 19

I-50016 San Domenico di Fiesole (FI)

Fax: +39055 4685755

E-mail: fsr@eui.eu

<http://www.eui.eu/RSCAS/ProfessionalDevelopment/FSR/>

Abstract

This article discusses the relationship between Member State obligations to facilitate a stable internal electricity market investment climate on the one hand and rights to intervene in investment decisions by launching a tender procedure on the other hand. The author argues that, although responsibility for investments in new electricity generation capacity is at the outset left to market participants based on electricity market price signals, public intervention mechanisms still have a part to play in promoting desired investments. Member State obligations to facilitate a stable investment climate are not necessarily sufficient to ensure security of supply. Given the complexity of the market evaluations to be made and the fundamental interests involved in securing Member States electricity supplies, it is argued that Community institutions should practice some degree of self-restraint in their review of whether a tendering procedure is necessary in the security of supply interest. Furthermore, it is submitted that Member State rights to rely on demand-side tenders and tenders in the environmental interest may contribute to realize the overall EU energy policy priorities of environmental protection and security of supply.

Keywords

EU, energy, electricity, market, investments

1 Introduction¹

The object of this article is to discuss the relationship between public facilitation of EU electricity wholesale markets and public intervention in these markets by ways of launching tenders in the long-term security of electricity supply interest.²

As held by the Commission in its 1988 Working Document on The Internal Energy Market,

The energy policy of the Community rests on an appropriate combination of the play of market forces, observed in particular by the internal market provisions, and the political measures guaranteeing or providing for Community supplies.³

This combination of the play of market forces and more interventionist approaches is illustrated by the provisions relating to the construction of new electricity generation capacity in the Electricity Directive⁴ and in the Security of Electricity Supply Directive.⁵ These provisions are based on the regulatory point of departure that investments in new generation capacity shall be made by market participants based on the price signals communicated by functioning electricity wholesale markets. At the same time, public intervention through the launching of a tendering procedure for the building of new electricity capacity is permitted when necessary to ensure security of supply in accordance with Article 7 of the Electricity Directive.

A public tender for new electricity generation capacity transfers the initiative for capacity investments from the market participants to the regulatory authorities by allowing the latter to choose which projects to put on tender. The realization of the project is ensured by providing an element of subsidy to the successful bidder. Regulatory authorities may for example offer to enter into long-term power purchase contracts with potential generation capacity investors, where the subsidy element is provided by the difference between market prices and the fixed price offered by the successful bidder under the power purchase contract.⁶

The underlying question in the assessment of whether tenders are necessary in the security of supply interest is to what extent market participants are liable to make the investments needed to ensure the long-term supply-demand balance based on the price signals of competitive electricity markets. This article will particularly focus on the obligations of Member States to establish functioning electricity markets in order to attract investments on the one hand, and their freedom to intervene in the market by launching a tender for new generation capacity in the security of supply

1 The author would like to thank professor dr. juris Ulf Hammer and the external reviewers at the Florence School of Regulation for their valuable comments to an earlier draft of this article. The author bears sole responsibility for any remaining shortcomings in the text.

2 An electricity wholesale market can be defined as a market for selling and buying of electricity in bulk, i.e. a market where electricity generators can sell their output and suppliers can source the electricity they need to supply end consumers, see DG Competition Report on Energy Sector Inquiry, 10 January 2007, SEC(2006) 1724, 119 et seq.

3 Commission Working Document, The internal energy market, COM(88) 238 final, 8.

4 Directive 2003/54/EC of the European Parliament and of the Council of 26 June 2003 concerning common rules for the internal market in electricity and repealing Directive 96/92/EC, OJ L 176/37, 15.07.2003.

5 Directive 2005/89/EC of the European Parliament and of the Council of 18 January 2006 concerning measures to safeguard security of electricity supply and infrastructure investment, OJ L 33/22, 04.02.2006. Member States are under an obligation to transpose the Directive by 24 February 2008.

6 The assessment of to what extent these subsidies involve State aid within the meaning of Article 87(1) EC will not be discussed further in this article. However, as a general point of departure one may assume that a subsidy granted in accordance with the detailed tendering criteria of Article 7 of the Electricity Directive is likely to fulfil the four cumulative criteria set forth by the Court of Justice in Case C-280/00, *Altmark Trans GmbH and Regierungspräsidium Magdeburg v Nahverkehrsgesellschaft Altmark GmbH*, [2003] ECR I-7747, and thereby escape the classification as State aid in accordance with Article 87(1) EC.

interest on the other hand. In section 2, the regulatory point of departure for electricity generation capacity investments under Community law is further outlined. In section 3, the Member States' obligations to facilitate a stable investment climate and avoid regulatory uncertainty in order to attract necessary investments are discussed. Section 4 discusses the tendering option in Article 7 of the Electricity Directive in more detail, while the relationship between the Member States' choice of tendering projects and the realization of EU energy policy targets are discussed in section 5. Section 6 concludes.

2 Generation capacity investments within the context of a competitive electricity market

The regulatory point of departure for the building of new electricity generation capacity under EC law is that investments should be made by market participants based on the price signals communicated by functioning electricity wholesale markets, subject to authorizations from regulatory authorities.⁷ The basic idea is to introduce competition as an instrument to achieve efficiency and market integration, assuming that an efficient market will also promote long-term security of supply. This point of departure is reflected in Article 6 of the Electricity Directive, which requires Member States to adopt an authorization procedure for the building of new electricity generation capacity initiated by investment proposals made by market participants. As will be further discussed in section 3, the same point of departure is also reflected by the Security of Electricity Supply Directive.

In a perfect market, the electricity supply and demand curves intersect to form a market equilibrium where the goal of allocative efficiency is achieved.⁸ Perfect markets are based on the key assumptions of perfect competition, perfect information and the non-existence of externalities and public goods.⁹ These market assumptions are never fulfilled in practice. Breaches imply market failures, with the result that the market will fail to produce economic efficiency.¹⁰ The most characteristic market failure in the electricity sector is related to imperfect competition due to market structure. The assumption of perfect competition will only be fulfilled if there are sufficiently many and small actors on the market that no individual market actor can affect market prices by its decisions.¹¹ Electricity markets, on the other hand, are often characterised by large concentrations on the supply-side, often dominated by one or a few incumbents. The recent Energy Sector Inquiry of the Commission shows that most wholesale markets are still national in scope, with a high level of concentration in electricity generation.¹²

Imperfect competition leads to a market outcome that results in too little being produced at too high a price.¹³ Consequently, market imperfections lead to economic inefficiency and potential security of supply concerns due to lack of supply-side investments. The consequences of such market imperfections may be amplified by regulatory imperfections such as regulatory uncertainty caused by unclear and non-transparent procedures relating to potential market intervention. A situation with imperfect competition and under-investment may however also be sustained by strict, but legitimate, authorisation requirements for the building of new electricity generation capacity, restricting new investments and the entry of new market participants.¹⁴

7 See, for example, the Commission's Explanatory Memorandum to its proposal for a Security of Electricity Supply Directive, COM(2003) 740 final, 10.12.2003, 4.

8 Richard J. Pierce, Jr. and Ernest Gellhorn, *Regulated Industries* (fourth edition, West Group, 1999), 57.

9 Ulf Hammer, *EC Secondary Legislation of Network Markets and Public Service: An Economic and Functional Approach*, *Journal of Network Industries*, 2002, 39-75 on 41-43 with further references.

10 Joseph E. Stiglitz and Carl E. Walsh, *Economics* (third edition, W.W.Norton & Company, 2002), 227 et seq.

11 *Ibid.*, at 228-230.

12 *Supra*, note 2 at 130-150.

13 *Supra*, note 10 at 231.

14 The criteria which Member States may lay down for the grant of authorizations for electricity generation capacity construction are further specified in Article 6(2) of the Electricity Directive.

There are in principle two ways to deal with the market challenges and regulatory challenges outlined above. One solution is to adopt regulation which reduces market imperfections and regulatory uncertainty and thereby facilitates economic efficiency and security of supply. The Member States' obligations to ensure security of supply by facilitating a stable investment climate is further discussed in section 3 below. The other solution is to promote desired investments more directly through State intervention. This solution is discussed further in section 4 below in respect of the tender procedure in Article 7 of the Electricity Directive.

3 Obligations to facilitate a stable investment climate and avoid regulatory uncertainty

3.1 Introduction

The role of functioning markets in securing investments and supplies is further highlighted in Article 3(1) of the Security of Electricity Supply Directive. The provision provides that

Member States shall ensure a high level of security of electricity supply by taking the necessary measures to facilitate a stable investment climate and by defining the roles and responsibilities of competent authorities, including regulatory authorities where relevant, and all relevant market actors and publishing information thereon. The relevant market actors include, inter alia, transmission and distribution system operators, electricity generators, suppliers and final customers.

Consequently, the facilitation of a stable investment climate and the definition of roles and responsibilities are among the key measures put forward by the Directive in order to safeguard 'security of electricity supply so as to ensure the proper functioning of the internal market for electricity and to ensure [...] an adequate level of generation capacity [and] an adequate balance between supply and demand'.¹⁵ The obligations to facilitate a stable investment climate and defining the roles and responsibilities of market participants are further discussed in section 3.2 and 3.3 respectively.

3.2 Measures to facilitate a stable investment climate

The stable investment climate obligation in Article 3(1) of the Security of Electricity Supply Directive is widely formulated. Member States are obliged to ensure a high level of security of electricity supply 'by taking the necessary measures to facilitate a stable investment climate'.

Article 3(2) provides some guidance as to the understanding of the obligations in Article 3(1) by providing a list of considerations to be taken into account when implementing the measures in Article 3(1). Article 3(2)(b) and (g) set forth that Member States shall take account of the importance of a transparent and stable regulatory framework and the importance of encouraging the establishment of liquid wholesale markets respectively. These considerations are accompanied by the obligation in Article 5(1)(a) that Member States, as one of the appropriate measures to maintain a balance between electricity demand and generation capacity availability, shall 'encourage the establishment of a wholesale market framework that provides suitable price signals for generation and consumption'. Of similar interest, Article 3(3)(d) sets forth that Member States *may* also take into account the importance of removing administrative barriers to investments in infrastructure and generation capacity.

The above mentioned provisions underscore that the obligation in Article 3(1) must be viewed in context of the regulatory point of departure for electricity generation capacity investments: Functioning electricity wholesale markets and absence of regulatory uncertainty is the principal vehicle to promote market efficiency and long-term security of supply. The question is, however, how far-reaching the obligation in Article 3(1) of the Security of Electricity Supply Directive is in requiring that Member States promote functioning electricity wholesale markets.

¹⁵ Article 1(1)(a) and (b) of the Security of Electricity Supply Directive.

On the one hand, Article 3(1) can clearly not be interpreted as requiring that Member States establish perfect competition in their electricity markets. Imperfect competition will exist in any market, including electricity markets, even though a regulator may seek to avoid it. Requiring Member States to establish a situation close to perfect competition would imply obligations to force divestitures of the incumbents far beyond the requirements of EC competition law.

On the other hand, the provision could be read as requiring the establishment of a *functioning* electricity market as set forth in Article 1(1) of the Security of Electricity Directive. However, the term functioning market does not have a precise meaning. It is no more precise than the Member State requirement to encourage the establishment of a liquid wholesale market that provides ‘suitable price signals’ for generation and consumption.¹⁶

Given the general nature of the stable investment climate obligation in Article 3(1), it is open to question whether the provision can be perceived as anything more than a declaration of policy. In particular, it is difficult to envisage what active contributions the provision may require Member States to perform in order to facilitate a stable investment climate. Such active contributions are in many cases already regulated by other parts of Community law. For example, easier access to building permits could facilitate access to the market for new participants and thereby erode the market shares of incumbents, improving the investment climate and market functioning. Yet, the provision cannot be interpreted as requiring Member States to remove burdensome authorization criteria for the building of new electricity generation capacity as long as these criteria are permitted by Article 6 of the Electricity Directive. In the same manner, the Member States cannot be required to actively contribute to a less concentrated market structure by other means than the enforcement of EC competition law principles. It is therefore submitted that the provision as a point of departure must be interpreted as a best-efforts obligation rather than an obligation of results for Member States.

On the other hand, it could be argued that the provision prohibits government actions which are particularly harmful to the investment climate, such as price regulation in electricity wholesale markets. Such price caps may contribute to investor uncertainty in generation capacity investment decisions and thereby be counterproductive to the facilitation of a stable investment climate and security of supply.¹⁷

Price caps are not explicitly prohibited by the Electricity Directive or the Security of Electricity Supply Directive, neither in wholesale markets nor in retail markets.¹⁸ However, given that price caps are likely to undermine the ability of wholesale markets to provide suitable price signals for investments, such regulatory measures are contrary to the aims and means promoted by the Security of Electricity Supply Directive. It is therefore submitted that the stable investment climate obligation in Article 3 of the Security of Electricity Supply Directive must be interpreted as prohibiting price caps in electricity wholesale markets. Consequently, the provision could amount to more than just a declaration of policy in respect of prohibiting public measures which are harmful to the facilitation of a stable investment climate.

16 Articles 3(2)(b) and 5(1)(a) of the Security of Electricity Supply Directive.

17 Communication from the Commission to the European Parliament and the Council, COM(2003) 743 final, 10.12.2003, 8 and Communication from the Commission to the Council and the European Parliament, Prospects for the internal gas and electricity market, 10.01.2007, COM(2006) 841 final, 8-9.

18 The universal service provision in Article 3(3) of the Electricity Directive may even require Member States to introduce price caps for household customers in retail markets in some situations, by requiring that household customers are guaranteed *reasonable* electricity prices. As held by the Commission, price regulation may also, dependent on its design, breach other Community provisions. Several infringement procedures have already been launched in this respect, see the Commission’s Communication on Prospects for the internal gas and electricity market, *supra*, note 17 at 9.

3.3 Defining the roles and responsibilities in electricity generation investment decisions

Article 3(1) of the Security of Electricity Supply Directive also imposes an obligation on the Member States to define the roles and responsibilities of competent authorities and market participants. This obligation must be viewed on the background of the importance of avoiding regulatory uncertainty in investment decisions by defining clearly which participants that have a security of supply responsibility and how it should be performed. However, Community law also restricts the Member States' freedom to determine how these roles and responsibilities could be defined.

In respect of Member States, Community law does not put into question their role as regulatory authorities in decisions relating to new investments in electricity generation capacity.¹⁹ The role of market participants in electricity generation investments is also at the outset relatively clear. The investment initiative is primarily left to existing and potentially new electricity producers and suppliers. Entities involved in transmission or distribution of electricity, i.e. Transmission System Operators and Distribution System Operators, are on the other hand precluded from acquiring electricity generation plants in accordance with the unbundling requirements of the Electricity Directive.²⁰

One could raise the question whether electricity network operators, and in particular TSOs, may be entitled to acquire generation facilities for reserve capacity purposes based on their obligation to ensure an appropriate level of reserve generation capacity for extraordinary situations. Member States are under an obligation to require TSOs to ensure sufficient generation reserve capacity in accordance with Article 5(1)(b) of the Security of Electricity Supply Directive, but the provision does not set forth how this objective should be obtained by TSOs. The list of measures included in paragraph 10 of the preamble to the Directive, viewed in relation to the TSO responsibility for reserve capacity, seem to presuppose that the TSOs shall procure the electricity needed for reserve capacity purposes or in other ways guarantee the availability of such capacity belonging to other producers. The preamble does not in any way indicate that the TSOs may procure electricity generation capacity and thereby own the facilities which shall provide the generation reserve capacity. This corresponds to the point of departure in the Electricity Directive that TSOs shall not be involved in generation activities, and is also supported by the requirement that the measures adopted by the TSOs should be market based.

While the question of the roles of regulatory authorities and market participants in electricity generation investments are relatively clear, the question of how their *responsibilities* can be defined under Community law is more complex. In essence, this raises the question of in what situations investment decisions should be left to market participants based on the authorization procedure, and in what situations regulatory authorities can intervene in the market in order to promote investments in the security of supply interest. This problem will be illustrated in the following through a discussion of the Member States' right to intervene in the form of launching a tender for the building of new generation capacity.

19 Article 23 of the Electricity Directive does require that some tasks shall be performed by independent regulatory authorities, but regulatory issues pertaining to electricity generation capacity investments as such are not included in this scope of work. A similar view is expressed in Note of DG Energy & Transport on Directives 2003/54/EC and 2003/55/EC on the internal market in electricity and natural gas, The role of the regulatory authorities, 14.1.2004, 3.

20 Articles 10(1) and 10(5) respectively of the Electricity Directive require that TSOs and DSOs which are part of vertical integrated undertakings 'shall be independent at least in terms of its legal form, organization and decision making from other activities not relating to [transmission/distribution].' The Directive does not require ownership unbundling in this respect, see Articles 10(1) and 15(1) and paragraph 8, second subparagraph of the preamble to the Electricity Directive.

4 Tendering for new electricity generation capacity in the security of supply interest

4.1 Introduction

The establishment of a market as the primary instrument to promote necessary investments does not mean that Member States are always precluded from intervening in the electricity market in order to promote new electricity generation investments.²¹ Launching a tendering procedure for publicly desired supply-side or demand-side investments is one alternative in this respect.

The tendering provision in Article 7(1) of the Electricity Directive has two main functions. On the one hand, it requires Member States to ensure the possibility of providing for new generation capacity or demand-side management measures through a tendering process or any procedure equivalent in terms of transparency and non-discrimination in the security of supply interest.²² This implies that Member States are under an obligation to make preparations for the potential launching of tendering procedures at short notice in the case of a strained supply-demand balance.²³ On the other hand, the provision restricts the Member States' freedom to apply such tendering procedures as an exemption from the authorization procedure.

In the latter respect, Article 7(1) second sentence provides that tendering procedures or equivalent measures providing for new capacity or energy efficiency/demand-side management can

only be launched if on the basis of the authorisation procedure the generating capacity being built or the energy efficiency/demand-side management measures being taken are not sufficient to ensure security of supply.

This limitation raises two questions. Firstly, the wording of the provision raises the question of how the concept of 'security of supply' should be interpreted within the context of Article 7(1). This question is dealt with in section 4.2 below. The second question, which is discussed in section 4.3 below, is how to determine when the authorisation procedure is 'not sufficient to ensure' the aim of security of supply.

4.2 The concept of security of supply

4.2.1 Uninterrupted electricity supplies to end-users

Given that a tendering procedure may only be launched in accordance with Article 7(1) when the authorization procedure is not sufficient to ensure 'security of supply', it is crucial to have a clear understanding of the definition of the term.

The concept of security of supply is not defined in the Electricity Directive. The Security of Electricity Supply Directive defines 'security of electricity supply' as 'the ability of an electricity system to supply final customers with electricity, as provided for under this Directive'.²⁴ The specific reference to the provisions of the Security of Electricity Supply Directive in the last part of the definition reduces its value as a universal definition of security of supply.²⁵ Nonetheless, applying the

21 See, for example, Article 5(2)(a) of the Security of Electricity Supply Directive.

22 Note of DG Energy & Transport on Directives 2003/54/EC and 2003/55/EC on the Internal Market in Electricity and Natural Gas, Measures to Secure Electricity Supply, 16.01.2004, 6-7 provides for an overview of other procedures 'equivalent in terms of transparency and non-discrimination'. For the sake of simplicity, I will only refer to the tendering option in the following.

23 See Christopher W. Jones, EU Energy Law (Clayes & Casteels, 2006 (2nd ed.)), 316-318 for a further discussion on this requirement.

24 Article 2(b) of the Directive.

25 This reference is also liable to make the definition circular and of limited value to the understanding of the Directive. It is worth noting that no similar definition was proposed by the Commission in its initial proposal for a Security of Electricity Supply Directive, COM(2003) 740, 10.12.2003.

first part of the definition to the Electricity Directive does provide some guidance as to the understanding of Article 7. In the latter context, the question is whether the measures taken in accordance with the authorisation procedure are sufficient to ensure the ability of the electricity system to supply final customers with electricity.²⁶

The definition provided above emphasises the absence of interruptions of electricity supplies to final customers as a core security of supply interest.²⁷ As held by the Council in its resolution on energy objectives from 1986,

the aim of any energy policy is to enable consumers to have adequate and secure supplies of energy under satisfactory economic conditions, which is one of the prerequisites for competitive structures and satisfactory economic growth.²⁸

The objective of providing uninterrupted services to end-users is also highlighted in other attempts to define security of supply and energy security, both universally and regionally.²⁹ The term security of supply as it is applied in Article 7 of the Electricity Directive therefore clearly includes the objective of uninterrupted electricity supplies to final customers.

4.2.2 Supply interruptions and electricity prices

A more complicated question is whether, as indicated in the definitions referred to in section 4.2.1 above, security of supply also means that final customers shall have access to electricity supplies at *reasonable prices*.

Electricity prices in a competitive market fluctuate due to shifts in market demand and supply. Changes in demand patterns may be consumer-related, such as higher household income resulting in higher demand for electricity-demanding appliances, or industry-related, such as increased productivity in energy intensive industry, or both. Shifts in market supply may be due to circumstances such as decreased availability of generation fuel input, for example dry years resulting in drained water reservoirs in hydropower systems, or increased prices of fuel input such as natural gas, or changes in the expectancy of future conditions by producers or suppliers.

The quantity of electricity supplied and demanded has traditionally shown low price sensitivity, at least in the short and medium term.³⁰ Electricity prices may therefore remain high in the shorter term due to shifts in market supply and demand. In the longer run it is assumed that higher prices will contribute to a decrease in demand and increase in supply. Energy consuming products and activities may be replaced by more energy-efficient solutions on the demand side, and an increase in prices will eventually lead to new investments in generation on the supply-side. These long-term changes in demand and supply will in turn promote the long-term security of supply and result in lower electricity prices. Consequently, fluctuations in electricity prices is a necessity for the market to be able to deliver

26 The term 'electricity system' as applied here and in the Security of Electricity Supply Directive must be understood as referring to the complete electricity resource chain from generation to consumption. It is therefore wider than the term as it is applied under the Electricity Directive, i.e. as a reference to the electricity transportation system excluding generation facilities, see the definitions in Articles 2(3), 2(4), 2(5), 2(13), 2(14) and 2(18) of the Electricity Directive.

27 This view also corresponds to the definition of 'supply' in Article 2(19) of the Electricity Directive.

28 Council Resolution of 16 September 1986 concerning new Community energy policy objectives for 1995 and convergence of the policies of the Member States, OJ C 241/1, 25.09.86, 2.

29 See the Commission's Green Paper Towards a European strategy for the security of energy supply, COM(2000) 769 final, 2 with respect to EU energy policy, and in the United Nations Development Programme (José Goldemberg and Thomas B. Johansson (ed.)), *World Energy Assessment – overview 2004 update* (2004), 42 and Barton et al., *Energy Security, Managing Risk in a Dynamic Legal and Regulatory Framework* (Oxford, 2004), 5 with respect to definitions of a more universal character.

30 International Energy Agency (IEA), *Electricity Reform, Power Generation Costs and Investment* (OECD/IEA, 1999), 63-64.

long-term security of supply in terms of necessary supply-side and demand-side investments in order to meet the long-term supply-demand balance.³¹

In my opinion, it would be inconsistent to interpret the term security of supply to the effect that it opens up for exemptions from the general authorisation procedure in the interest of reasonable electricity prices, given that fluctuations in electricity prices are a decisive component in the market system sought to be introduced by the Electricity Directive. High end-user electricity prices cannot therefore as a point of departure justify intervention in the security of supply interest in accordance with the tendering procedure in Article 7 of the Electricity Directive. Two reservations should however be made to this point of departure.

Firstly, increasing electricity prices may indicate the need for new supply-side or demand-side investments in order to avoid future supply interruptions. Hence, a Member State may choose to focus on the risks of supply interruptions rather than the price increase when seeking to justify the need for a tendering procedure. The fact that public intervention may lead to a price decrease for end-users as a by-effect cannot prevent a Member State from applying it if the main objective is to avoid supply interruptions. In other words, the Member State's intervention may in principle be justified given that its motivation extends beyond mere economic considerations.³² Another question is whether State intervention is *necessary* in such cases. This will be further discussed in section 4.3 below.

Secondly, one may raise the question whether risks of sudden and high price increases, so-called price spikes, may be construed as a security of supply concern given the significant impact this may have on the economy of end-users and Member States. Although it is generally acknowledged that economic interests as such cannot justify exemptions from Community law,³³ the economic effects of electricity price spikes may ultimately threaten other legitimate interests, such as public health concerns or public security. It cannot therefore be ruled out that the security of supply exemption in Article 7 of the Electricity Directive may be relied upon in extraordinary situations where the risk of a sudden and sharp price increase arises.

4.3 Investments not sufficient to ensure security of supply

4.3.1 Introduction

Article 7 of the Electricity Directive provides that the tendering procedure may only be launched if the supply- or demand-side measures being taken on the basis of the authorization procedure are not sufficient to ensure security of supply. As concluded above in section 4.2, the procedure can consequently only be launched if the measures otherwise implemented by the market participants are not sufficient to ensure non-interrupted future electricity supplies and – possibly – the absence of price spikes.

The question to be addressed in the following is in what situations the condition ‘not sufficient to ensure’ is fulfilled. The answer to this question depends on the nature of the security of supply risk which the Member State seeks to prevent. In the following, Article 7(1) will be discussed in relation to risks of primary fuel interruptions below in section 4.3.2, before lack of generation capacity in general is discussed in section 4.3.3 and the lack of reserve capacity in particular is discussed in section 4.3.4.

31 IEA, *Lessons from Liberalised Electricity Markets* (OECD/IEA, 2005), in particular at 117 et seq.

32 See similarly the reasoning of the Court of Justice in respect of petroleum supplies and Article 30 EC in the well known case 72/83, *Campus Oil*, [1984] ECR 2727, paragraph 35.

33 See, for example, Catherine Barnard, *The Substantive Law of the EU, The Four Freedoms* (Oxford University Press, 2004), 109 with further references on exemptions from the free movement provisions of the EC Treaty.

4.3.2 Public intervention to reduce impact of interruptions in primary fuel supply

Electricity supply disruptions, combined with electricity price increases, may arise as a result of a lack of primary energy sources for electricity generation. Risk of primary energy source disruptions therefore also represents an electricity supply disruption risk.

The risk of disruptions in primary energy sources will in many cases be beyond the control of Member States. This is particularly noticeable in respect of the geopolitical risks involved in the fossil fuel import dependency of the EU.³⁴ Events beyond the reach of the EU internal energy market decision-making, such as political unrest in producer countries or politically motivated export restrictions, may contribute to abrupt halts in EU natural gas imports or sudden price increases.³⁵ Disruptions in natural gas supply are liable to influence electricity generation in Member States with a high degree of gas dependency on the electricity supply-side. Depending on the supply- and demand-side flexibility of the electricity market in question, this situation may lead to rapid and unforeseen electricity price increases and, in the worst case, supply interruptions for end-users. Similar situation may be perceived in respect of other primary energy sources, such as for example low reservoir levels in hydropower systems as a result of dry years.

A Member State may desire to reduce the potential consequences of disruptions in primary fuels by increasing supply-side or demand-side flexibility. On the supply-side, the risks may be reduced by promoting a diversified energy mix for electricity generation, e.g. by seeking to establish electricity generation plants with different supply sources. On the demand-side, the risks may be mitigated by, *inter alia*, entering into agreement with large-scale end-users to reduce electricity consumption in extraordinary situations.³⁶

Market participants will seek to maximize profits by choosing the least expensive input factors when building new electricity generation plants. It is therefore unlikely that market participants will pursue a public aim of energy mix diversification in absence of public regulation. A diversified energy mix may be promoted by setting specific primary energy fuel criteria for the authorization of new generation capacity construction.³⁷ The question which arises is in what situations such authorization criteria are insufficient to ensure future uninterrupted electricity supplies and the absence of price spikes in the event of disruptions in primary energy sources.

It is hard to predict the risks of interruptions in the primary energy sources, given the lack of control over the events which may cause these interruptions. On the other hand, it is possible to analyse whether the electricity system has the supply-side and/or demand-side flexibility to meet the challenges raised by a predetermined primary fuel interruption. The important question is therefore how extensive primary fuel interruptions a Member State may take into account in its estimate of system flexibility requirements when determining whether security of supply will be ensured on the basis of the authorization procedure.

In principle, the Community may argue that a Member State's estimate of possible future primary fuel interruptions is excessive, and that the authorization procedure is liable to ensure security of electricity supply based on a more realistic estimate of less extensive fuel interruptions. Consequently, the conditions in Article 7(1) will not be fulfilled, and the Member State may not launch a tendering procedure.

34 See, *inter alia*, Communication from the Commission to the European Council and the European Parliament, An Energy Policy for Europe, 10.01.2007, COM(2007) 1 final, 3-4 on the external energy dependency of the EU.

35 Study on Energy Supply Security and Geopolitics, Final Report, January 2004, report by Clingendael International Energy Programme prepared for DG TREN, 38.

36 In the following, only supply-side tenders will be discussed for the sake of simplicity.

37 See in particular Article 6(2)(g) of the Electricity Directive, which specifically permits the setting of criteria related to the nature of primary energy sources under the authorization procedure.

On the other hand, Community review of potential primary fuel interruptions in reality raises the question of the Member States' freedom to determine their level of protection in energy security matters. In my opinion, Community institutions should therefore exercise a degree of self-restraint in reviewing these Member State estimates of possible primary fuel interruptions, which may involve uncertainties related to issues such as geopolitical developments in producer and transit countries or precipitation in hydropower systems. This assessment will in practice be a part of a Member State's long-term risk governance strategy in order to avoid future supply risks. The fact that the risk has not yet materialized at the point in time when the assessment is made can make a review of the evaluation even more difficult.

The proportionality assessment carried out by the Court of Justice in its assessment of mandatory requirements under the four freedoms could act as a source of inspiration in this respect. The question of whether a legitimate interest could be attained by measures which are less restrictive to trade, i.e. the necessity of the restriction in question, is often made subject to intense scrutiny in the Court's assessment. On the other hand, the Court tends to show a great deal of self-restraint in the assessment of the level of protection chosen by Member States when evaluating the proportionality *sensu stricto* of the measure.³⁸

In my opinion, it should therefore be left to the Member States to decide whether a national electricity system should be designed to endure long-term shortages in primary energy sources or only to deal with short-term disruptions. This implies that Member States, in setting their level of energy security in relation to primary energy sources, also in reality retain substantial control over the assessment over when tendering is necessary to pursue the security of supply interest. If a Member State which relies heavily on electricity generation from imported natural gas decides that their electricity supply-side should be designed to tolerate long-term gas import shortages, it could easily be established that tendering is necessary in order to ensure security of supply in such situations.

On the other hand, tendering cannot be deemed to be necessary in order to avoid a marginal electricity price increase as a result of decreased availability of primary energy sources. Such shifts in the supply curve will in theory be met by decreased electricity consumption. The market system pursued by the internal electricity market establishment is therefore sufficient to handle the situation in absence of public intervention.

4.3.3 Public intervention to increase aggregate electricity generation capacity in the security of supply interest

Notwithstanding the availability of primary energy sources, a concern that the future availability of electricity generation capacity in general is insufficient to meet electricity demand may also arise as a result of market participants' failure to invest in new generation capacity. Unlike interruptions in primary energy supplies, these market failures can be made subject to control through internal electricity market regulation.

As emphasized above in sections 2 and 3, the clear point of departure under the Security of Electricity Supply Directive is that the establishment of a functioning wholesale market is the means to attract sufficient supply-side investments. Electricity markets will however be subject to varying degrees of market failures. The question is therefore whether a Member State may decide to launch a tender due to a concern that the existence of market imperfections may result in under-investment.

If supply-side investments deemed necessary by the Member State are not made despite the fact that the investment climate obligations in the Security of Electricity Supply Directive have been complied with, launching a tendering procedure should in principle be permitted. A complicating matter is however whether the supply-side investments deemed necessary by a Member State are in

38 Jan H. Jans, Proportionality Revisited, in *Legal Issues of Economic Integration* 2000, 239-265, on 248-252.

fact necessary in the security of supply interest, or whether a delay in investments will only lead to a marginal price increase which contributes to a reduction in consumption. The tendering procedure may only be launched if the generating capacity being built *or the energy efficiency/demand-side measures being taken* on the basis of the authorization procedure are not sufficient to ensure security of supply. This implies that the question of the relative long-term price elasticity of demand is important for the determination of whether public intervention is necessary to ensure the long-term security of supply. The price elasticity of demand may vary from country to country, depending on market characteristics such as the actual possibilities for consumers to reduce electricity consumption or to switch to other energy sources.³⁹ The assessment of whether the launching of a tender may be permitted in these situations in accordance with Article 7(1) of the Electricity Directive therefore requires a precise diagnosis of the functioning of the supply-side and the demand-side of the electricity market in question.

One may also raise the question whether a tendering procedure can be launched even though the security of supply problem has arisen as a result of a Member State's failure to comply with the obligations of the Security of Electricity Supply Directive. The market participants' failure to invest could, for example, be a consequence of regulatory uncertainty created by government actions contrary to the obligations in Article 3(1) of the Security of Electricity Supply Directive. If application of the tendering procedure is allowed in this situation, it will in principle mean that a Member State may rely on an exemption from the main rules in the Electricity Directive in order to remedy the effects of a failure to comply with the Security of Electricity Supply Directive. However, given that there might not be enough time to promote necessary investments indirectly by correcting market failures and eliminating regulatory uncertainty, tendering cannot in my opinion be precluded as such, provided of course that it is deemed necessary to ensure non-interrupted supplies and/or the avoidance of price spikes. Provided that the reasons for a capacity shortfall can be traced to a breach of secondary law obligations, it is however good reason to assume that the question of the necessity in launching a tender will be subject to intense Community scrutiny in these situations.

4.3.4 Public intervention to ensure sufficient electricity reserve capacity in the security of supply interest

Despite the point of departure that electricity generation capacity investments should be made by market participants in accordance with the authorization procedure, Community law recognizes that further regulation may be necessary in order to ensure sufficient reserve capacity.

The term 'reserve capacity' is not defined in the Electricity Directive or in the Security of Electricity Supply Directive. In broad terms, it can be described as the electricity generation capacity, usually kept unused, which is employed only in the event of extraordinary demand levels.⁴⁰ Such extraordinary situations may arise as a result of shifts in demand due to natural circumstances such as extreme cold periods, or due to supply-side circumstances such as interruptions in parts of the generation or transportation facilities.

The fundamental difference between normal capacity and reserve capacity in a market perspective is based on the assumption that investments in reserve capacity necessary to ensure security of supply will not be made by market participants based solely on a consideration of their own commercial interest.⁴¹ This distinction between services of commercial interest and services of non-commercial

39 See, *inter alia*, Per Anker-Nilssen, *Energibruk og energipriser – et fordelingsproblem*, MAGMA Tidsskrift for økonomi og ledelse No. 5-6/2006, pages 93-102, for an example of the difficulties involved in measuring price-sensitivity of demand and the problems of social redistribution which may arise as a consequence of the price system in the Norwegian electricity market.

40 C. Jones, *supra*, note 23 at 31 (in note 39).

41 These policy concerns that the price mechanism of liberalized energy markets may not be sufficient to provide for necessary generation capacity to meet demand at all times is reflected, *inter alia*, in the Commission's Communication on

interest is also vital for determining the distinction between ordinary services and public service obligations carried out in the general economic interest.⁴² The Commission's reasoning concerning public service obligations in its *Irish CADA* State aid decision provides for an interesting example on how the line between services of commercial interest and services of non-commercial interest may be drawn in the electricity sector in this respect.⁴³ According to the Commission, one of the conditions for considering the setting up of sufficient reserve generation capacity as a service of general economic interest was that

A clear distinction is made between 'normal' capacity and 'reserve' capacity generation. The former being the capacity that the market would spontaneously provide to cover expected demand (or expected increases of demand) under normal market and regulatory conditions. Indeed, in a liberalised market, as with other products, private investors are expected to ensure that sufficient capacity is available to meet demand. In general terms, the price mechanism is the way that this is expected to be achieved in the competitive market. As prices rise investment will become viable and either more capacity will come on stream, or demand will be constrained. A transparent and reliable price mechanism for wholesale electricity is sufficient in this respect. The provision of (or the increase of) normal capacity generation cannot be considered a Service of General Economic Interest. [...]

The 'reserve' capacity is the additional capacity that would not be spontaneously provided by normal market forces but is considered necessary in order to meet peaks of demand. One may indeed wonder whether investors are prepared to invest in peaking capacity to cover the very highest periods of demand or incidents where a large proportion of other generation is not available. It is arguable that such investment might not occur because such events are infrequent and their occurrence is unpredictable. Accordingly there may be a case for governments to provide further measures, in addition to market mechanisms, to ensure adequate capacity is available.⁴⁴

Accordingly, internal electricity market regulation recognises that the market approach promoted by the authorisation procedure must be supplemented by public intervention mechanisms in some cases in order to ensure sufficient electricity generation capacity to meet supply at all times.

One may however question whether the criteria applied to draw the distinction between normal and reserve capacity are sufficiently clear to provide for an effective method on how to determine when public intervention should be permitted. The result will to a certain extent depend on the nature of the electricity market in question. For example, a hydropower system has significant flexibility with respect to regulating supply in order to meet different demand situations, which may render it difficult to draw a line between normal generation capacity facilities and reserve capacity. In typical base-load systems, on the other hand, the distinction between base-load facilities such as nuclear plants and more flexible peak load facilities such as natural gas plants may be easier to draw.

In theory, a less stringent approach to the question of when a tender should be permitted may not lead to such a different result. If a tender is permitted for the building of generation facilities which in reality must be regarded as 'normal' generation capacity, i.e. 'capacity that the market would

(Contd.) _____

Infrastructure and Security of Supply, *supra* note 17 at 8-9 and Final report on the Green Paper 'Towards a European strategy for the security of energy supply, COM(2002) 321 final, Annex II, 16.

42 The Court of Justice seems to emphasise this distinction in case C-179/90, *Merici convenzionali porto di Genova SpA v Siderurgica Gabrielli SpA*, [1991] ECR I-5889, paragraph 27, case C-242/95, *GT-Link A/S v De Danske Statsbaner (DSB)*, [1997] ECR I-4449, paragraph 53 and in Joined cases C-34/01 to C-38/01, *Enirisorse SpA and Ministero delle Finanze*, [2003] I-14243, paragraph 33. See also Note of DG Energy and Transport on Directives 2003/54/EC and 2003/55/EC on the internal market in electricity and natural gas – public service obligations, 16.1.2004, 2, which suggests that the definition in Regulation (EEC) No 1191/69 of the Council of 26 June 1969 on action by Member States concerning the obligations inherent in the concept of a public service in transport by rail, road and inland waterway, [1969] OJ L 156/1, Article 2(1) should be applied correspondingly to the energy market.

43 State aid N 475/2003 – Ireland, Public Service Obligations in respect of new electricity generation capacity for security of supply, C(2003)4488fin, 16.12.2003.

44 *Ibid.*, paragraph 35.

spontaneously provide to cover expected demand (or expected increases of demand) under normal market and regulatory conditions',⁴⁵ the best bidder under a competitive tender should in principle offer to invest at a price level which corresponds to electricity market prices. Consequently, the main difference between the tendering procedure and the authorization procedure would be that the Member States retain the right to actively choose which projects that should be built under the tendering procedure.

4.4 Concluding remarks

Community energy law is based on the regulatory point of departure that functioning electricity wholesale markets will provide the right price signals for electricity generators to undertake the investments needed to ensure security of supply, i.e. non-interrupted electricity supplies without price spikes to end users. This point of departure implies that the right to launch a tender as an exemption from the main rule should be interpreted restrictively.

On the other hand, a failure to secure supplies may lead to serious consequences for other fundamental interests of society such as public health and national security. The assessment of whether to accept a tender is also rendered difficult by the complicated and sometimes uncertain market assessments which must be carried out as part of the review procedure: Is a Member State's risk scenario in respect of potential interruptions in primary energy supplies realistic? Is an electricity wholesale market in a given Member State functioning in the sense that it stimulates the necessary supply-side investments? And to what extent will the demand-side in a given market react to price increases?

Based on the consideration above, Community institutions should in my opinion practice some degree of self-restraint in their review of potential tendering projects.

5 The relationship to other interventionist measures in the Community interest

5.1 Introduction

If a Member State is permitted to launch a tender in the security of supply interest, it is as a point of departure free to determine which supply-side or demand-side projects that should be made subject to tendering. The priorities of Member States in this respect may not always conform to the energy policy priorities of the Community. The question to be discussed in this section is whether the incorporation of these Community priorities in secondary legislation may restrict the Member States freedom of choice under the launching of a tendering procedure.

The main objectives of EU internal energy market policies are to establish an integrated, efficient and competitive energy market taking account of climate conservation and security of energy supplies.⁴⁶ Environmental concerns as well as the fossil fuel import dependency of the EU has led to a strong focus on demand-side management and promotion of renewable energy sources at EU level.⁴⁷ Both of these measures may in principle serve to alleviate national security of supply concerns as well as Community security of supply and environmental concerns. One may therefore question whether Community law requires Member States to take into consideration the possibilities of launching demand-side tenders or tenders for renewable electricity generation facilities before launching a tender for conventional generation facilities. The relationship to demand-side measures and renewable measures are discussed below in section 5.2 and 5.3 respectively.

45 *Irish CADA, ibid.* at paragraph 35, cited above.

46 See, *inter alia*, the Commission's Communication Energy Infrastructure and Security of Supply, *supra*, note 17 at 3 and the Commission's Green Paper 'A European Strategy for Sustainable, Competitive and Secure Energy', 08.03.2006, COM(2006) 105 final.

47 The Commission's Energy Green Paper, *ibid.*

Similarly, the construction of electricity interconnectors between Member States is a prerequisite for the establishment of a functioning internal electricity market, and is therefore another high priority of EU energy policy.⁴⁸ Interconnector construction has also been highlighted as a potential security of supply measure by the Commission.⁴⁹ The relationship between the tendering procedure and interconnector investments are further discussed in section 5.4 below.

5.2 Demand-side management as an alternative measure

In its decision in *Irish CADA*, the Commission emphasised that the first security of supply priority should normally be to ensure that policies are in place to control growth in demand before looking at supply-side measures, given that demand-side measures are cheaper, work faster and are more in line with the environmental commitments of the EU.⁵⁰ It could also be added that demand-side measures are liable to pursue the Community objective of reduced external energy dependency.⁵¹ Hence, efficiency objectives, environmental objectives as well as long-term security of supply objectives support the prioritisation of demand-side measures over supply-side measures.

The establishment of a competitive electricity market in itself implies that an assessment of the need for supply-side investments must be made in light of demand-side measures made by market participants. A Member State is not permitted to launch a tender if ordinary market conduct, such as reduced electricity demand due to higher electricity prices, is sufficient to ensure security of supply. Consequently, Member States are required to take into account the electricity conservation measures voluntarily implemented by end-users based on market price signals before launching a tender for new electricity generation capacity.

Community legislators are, however, so far of the opinion that the introduction of competition in retail markets has not lead to significant competition in products and services which could have resulted in improved energy efficiency on the demand side.⁵² Market intervention, for example by ways of a tendering procedure in accordance with Article 7 of the Electricity Directive, may therefore be necessary on the demand-side in order to pursue the goals of energy conservation and energy efficiency. A question which may be raised in this respect, is whether a Member State can be required to prioritise demand-side intervention over supply-side intervention in tendering decisions.

The wording of Article 7(1) of the Electricity Directive is quite clear in respect of the Member States' freedom to choose between supply-side and demand-side measures. It sets forth that tendering or equivalent procedures can only be launched 'if on the basis of the authorization procedure' the supply-side or demand-side measures being taken are not sufficient to ensure security of supply. The provision does not require that a Member State must implement specific demand-side measures in addition to the application of the authorization procedure before resorting to the tendering procedure. Neither does it require, when a decision to launch a tendering procedure has been made, that a Member State gives priority to demand-side tenders where possible. The Member States are therefore not required to prioritise other demand-side measures in the launching of a tendering procedure than those spontaneously provided by the market on the basis of the market price signals.

48 Communication from the Commission to the Council and the European Parliament, Priority Interconnection Plan, 10.01.2007, COM(2006) 846 final

49 *Ibid.*, at 3.

50 *Supra*, note 43 at paragraph 31.

51 Note of DG Energy & Transport on Measures to secure electricity supply, *supra*, note 22 at 7.

52 Paragraph 9 of the preamble to Directive 2006/32/EC of the European Parliament and of the Council of 5 April 2006 on energy end-use efficiency and energy services and repealing Council Directive 93/76/EC, OJ L 114/64, 27.4.2006.

The Security of Electricity Supply Directive emphasise that Member States may take account of demand-side measures in order to ensure security of supply.⁵³ These provisions are however not clear enough do be interpreted as requiring Member States to prioritise demand-side management over other measures. The Cogeneration Directive, which has as its objective to 'increase energy efficiency and improve security of supply by creating a framework for promotion and development of high efficiency cogeneration of heat and power based on useful heat demand and primary energy savings in the internal energy market' provides for a more interesting example in this respect.⁵⁴ According to Article 7(1) of the latter Directive,

Member States shall ensure that support for cogeneration - existing and future units - is based on the useful heat demand and primary energy savings, in the light of opportunities available for reducing energy demand through other economically feasible or environmental advantageous measures like other energy efficiency measures.

Consequently, the Cogeneration Directive seeks to strike a balance between supply-side and demand-side measures which goes beyond the requirements in the Electricity Directive and the Security of Electricity Supply Directive.

5.3 Renewables and choice of primary energy fuel

Article 7(1) does not separate between different primary energy sources as input factors for electricity generation. A Member State heavily dependant on natural gas imports for electricity generation may in principle just as well rely on tenders for coal fired generation facilities as for electricity generation from renewable energy sources. This conforms to the view emphasized by the Commission as well as the Member States that the choice of energy mix should be left to the discretion of each Member State.⁵⁵ A possible modification to this point of departure follows from the RES Directive, which requires Member States to take appropriate steps to encourage greater consumption of renewable electricity in conformity with their national indicative targets.⁵⁶ It could therefore be argued that a Member State which has not sought to comply with its indicative renewable targets is obliged to exploit its potential for renewable electricity production before relying on conventional energy sources when launching a tendering procedure.

Article 7(2) also permits the launching of a tendering procedure if on the basis of the authorization procedure the supply- or demand-side measures being taken are not sufficient to achieve the interests of environmental protection and the promotion of infant new technologies. Member States' level of environmental protection has not been made subject to total harmonization at European level. Member States are therefore free to determine that a high level of domestic electricity generation shall be based on renewable energy sources.⁵⁷ If this level of renewable electricity production is not achieved by market participants on the basis of the authorization procedure, Member States are free to launch

53 See in particular Articles 3(3)(c) and 5(2)(d) and (e) of the Directive.

54 Directive 2004/8/EC of the European Parliament and of the Council of 11 February 2004 on the promotion of cogeneration based on a useful heat demand in the internal energy market and amending Directive 92/42/EEC, OJ L52/50, 21.2.2004, Article 1. 'Cogeneration' means 'the simultaneous generation in one process of thermal energy and electrical and/or mechanical energy', see Article 3(a) of the Directive

55 The Commission's Energy Green Paper, *supra*, note 46 at 9 and the European Council in its meeting on 23 and 24 March 2006 in respect of establishing an energy policy for Europe, see the Presidency Conclusions 24 March 2006, 16.

56 Directive 2001/77/EC of the European Parliament and of the Council of 27 September 2001 on the promotion of electricity produced from renewable energy sources in the internal electricity market, [2001] OJ L 283/33. Member States shall also take account of the importance of ensuring proper implementation of the RES Directive and the Cogeneration Directive when implementing the stable investment climate obligations in Article 3(1) of the Security of Electricity Supply Directive, cf. Article 3(2)(e).

57 The RES Directive defines 'renewable energy sources' as 'renewable non-fossil energy sources (wind, solar, geothermal, wave, tidal, hydropower, biomass, landfill gas, sewage treatment plant gas and biogases)', see Article 2(a).

tenders in the environmental interest in accordance with Article 7(2) of the Electricity Directive.⁵⁸ As the provision also opens up for tenders relating to energy efficiency and demand-side measures, Member States will be equally free to launch demand-side tenders in order to achieve energy consumption targets in the environmental interest.

The difference in interests which may be pursued under Article 7(1) and 7(2) also leads to a more fundamental difference in approach to the assessments under the two paragraphs. In order to apply Article 7(1), Member States must verify that their diversification targets are necessary to ensure security of supply, i.e. that contributing to diversification through a tendering process will reduce the risks of electricity supply disruptions in case of primary energy source disruptions. Under Article 7(2), Member States may simply set a target for renewable energy production and apply the tendering procedure to reach that target to the extent that it is not achieved by market participants in accordance with the authorization procedure. This implies that it can *de facto* be easier for Member States to rely on tendering in the environmental interest than in the security of supply interest. Both the RES Directive and the Electricity Directive may therefore in principle contribute to Member State prioritization of renewable energy sources and demand-management measures.

5.4 Interconnector investments as an alternative measure

A more interconnected energy market has been one of the central objectives of EU energy policy since the start of the internal energy market establishment process.⁵⁹ Without such interconnection, the idea of creating one internal electricity market without internal frontiers in which free movement is ensured in accordance with the provisions of the EC Treaty, will not work.

In *Irish CADA*, the Commission also emphasized that development of new interconnection infrastructure is an instrument to secure Member States' supplies. According to the Commission, this solution is more rational than production aid schemes 'since it allows the correct functioning of the internal market, reduces market distortions and gives to the Member States the possibility to share reserve capacity. For the same reason this approach would generally reduce the need of reserve capacity at the level of each individual Member State'.⁶⁰ The main argument in this respect is that an integrated market provides for an increased number of supply alternatives for previously isolated regions, which in turn implies that reserve capacity for peak load situations may be shared between several Member States.⁶¹

Although Community energy policy interests may weigh heavily in favour of prioritising interconnector construction over national generation capacity investments in order to secure sufficient reserve capacity, this prioritisation is not clearly reflected in any Member State obligations under the Electricity Directive or the Security of Electricity Supply Directive. Article 7 of the Electricity Directive does not require that interconnector construction is given priority. Furthermore, neither Directives place any investment obligations on Member States or TSOs for the building of interconnectors.⁶² Community law cannot therefore be interpreted as requiring Member States to prioritise interconnector construction over domestic electricity generation tenders even if the former measure could contribute to the security of supply of the Member State in question.

58 See similarly C. Jones, *supra*, note 23 at 319.

59 Commission Working Document, *supra*, note 3 at 6.

60 *Supra*, note 43 at paragraph 32. In the case in question, however, the Commission recognised that interconnector construction would not be an economic rational way to meet security of supply shortfalls given Ireland's specific geographical situation, see paragraph 34 of the decision.

61 *Supra*, note 7 at 5.

62 See further Henrik Bjørnebye, *Interconnecting the Internal Electricity Market: A Goal Without a Plan?* in *Journal of Competition and Regulation in Network Industries*, Volume 1 (2006), No. 3, 333-353.

6 Conclusions

Community regulation of electricity generation capacity investments raises two fundamental challenges relating to the establishment of a European energy policy. Firstly, it raises the question of how to balance the relationship between facilitation of electricity markets on the one hand and public intervention in these markets on the other hand as means to promote necessary investments in the security of supply interest. Given that a Member State should be permitted to intervene in the market, the question also arises to what extent the instruments of intervention should be applied to further Community energy policy priorities in a broader sense, and not only national security of supply priorities.

The regulatory point of departure for the building of new electricity generation capacity under EC law is that investments should be made by market participants based on the price signals communicated by functioning electricity wholesale markets. This point of departure is particularly emphasized by the Member State obligations in the Security of Electricity Supply Directive to facilitate a stable investment. Consequently, neither Member States nor the Community should at the outset interfere in the investment decisions of market participants.

However, Member States may desire to promote investments by launching tender procedures based on their expectations of the market participants' willingness to invest in projects in the security of supply interest. It is argued in this article that Community institutions should practice some degree of self-restraint in their review of such tender procedures, given the complexity of the market evaluations to be made and the fundamental interests involved in securing Member States electricity supply. In this respect, it should also be considered that both authorization procedures and tendering procedures are liable to ensure the Community principles of non-discrimination, transparency and objectivity in electricity generation capacity decisions. The main reason for a restrictive approach to the tendering alternative is therefore the concern that such market interventions may distort the investment signals otherwise provided by wholesale markets and thereby prevent the proper functioning of the market.⁶³

Measures related to electricity conservation, promotion of renewable energy sources and interconnector construction may in principle contribute to ensure the security of supply of individual Member States as well as of the Community as such. Yet, there is limited basis in Community law for requiring Member States to prioritise these measures even in the situations where Member States are permitted to intervene in the market by launching a tender. On the other hand, it is *de facto* easier for a Member State to rely on a tender procedure in the environmental interest than in the security of supply interest.

The extensive Member State reporting obligations included in the Electricity Directive and the Security of Electricity Supply Directive as well as in the RES Directive and the Cogeneration Directive are likely to contribute to a better overview of national market conditions at Community level over time.⁶⁴ It cannot be ruled out that such overview may contribute to more intense review of the necessity of Member State intervention in the security of supply interest. Member States obligations to rely on the market function combined with a right of intervention in the environmental interest may therefore contribute to pursue the Community energy policy priorities of demand-management and promotion of renewable electricity production. Consequently, although public intervention through the launching of a tender procedure may be all wrong from a strict market perspective, it may prove to be all right when taking into account the broader priorities of Community energy policy.

63 Note of DG Energy & Transport on Measures to Secure Electricity Supply, *supra*, note 22 at 5-6. See similarly IEA, *supra*, note 31 at 118-132.

64 See further Article 4 of the Electricity Directive, Article 7 of the Security of Electricity Supply Directive, Articles 3(3) and 6(2) of the RES Directive and Article 10 of the Cogeneration Directive.

Henrik Bjørnebye
Research fellow
Scandinavian Institute of Maritime Law – Department of Petroleum and Energy Law
Faculty of Law
University of Oslo
E-mail: henrik.bjornebye@jus.uio.no