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Sakellaris, Kostis

Regulatory Authority for Energy, Greece, Athens University
of Economics and Business

25. January 2011

Online at <http://mpra.ub.uni-muenchen.de/29915/>
MPRA Paper No. 29915, posted 28. March 2011 / 21:07

SEE Regional Wholesale Market Design: Recommendations, Available Options and Implementation

Kostis Sakellaris^{#,*}

[#]*Regulatory Authority for Energy, Greece*

^{*}*Athens University of Economics and Business, Greece*

sakellaris@rae.gr

Abstract— In 2005 the countries of South East Europe (SEE) committed themselves to develop a regional energy market in SEE. The World Bank offered to provide technical assistance and recommendations for the most effective implementation of the electricity wholesale market opening. This paper presents and discusses the main proposals of the Study for the SEE Regional Market Design. It then proceeds to the provision of recommendations on how the Study’s proposals can be enhanced and fit better to the current status of the SEE markets.

Keywords — South East Europe, Regional Electricity Market, Market Design.

I. INTRODUCTION

The countries of South East Europe (SEE) signed in 2005 the Energy Community Treaty¹, committing themselves to develop a regional energy market, both for electricity and gas, in the SEE. Although significant progress has been made in various aspects of the energy market, especially regarding the introduction of the primary legislation related to the regulatory reforms, this process is far from complete.

For this reason, and in the electricity market context, the World Bank offered to provide technical assistance and recommendations for the most effective implementation of the electricity wholesale market opening in the SEE region in the form of a Study² [1], entitled “South East Europe Wholesale Market Opening” (hereon Study). The Study begun in early 2009 and was finalized in July 2010, after a productive exchange of comments and opinions with the Energy Community Regulatory Board - Electricity Working Group (ECRB EWG), a group comprising of representatives from the Energy Regulatory Authorities of each Contracting Party and the European Community. Since then, the competent authorities of the SEE region (Ministries and Regulators) have

been discussing on the adoption of the proposals of the Study and the details of its implementation.

The present paper describes and discusses the main proposals of the Study, and outlines the available options for the Parties. The main objective of the paper is the analysis of the above, offering recommendations both on the implementation of these proposals, as well as possible ways to further enhance them.

II. LITERATURE REVIEW

The SEE Regional Electricity Market (SEE REM) has been the subject of a number of recent papers. In [2] and [3] the authors discuss the key issues for the SEE electricity sector reform, noting that the observed delays in the electricity market opening are not so much due to the lack of legislative measures, but mainly to the reluctance of the governments to implement them. The latter would require them to take measures with significant political cost, like raising the retail tariffs and breaking up the vertical monopolies existing in each country, as well as minimizing their role in the electricity market, thus allowing the market to develop on its own, under the supervision of the regulators.

A detailed review of the steps that led to the establishment of the Energy Community and the implementation of the Energy Community Treaty up to 2008 is presented in [4]. Moreover, apart from containing an exhaustive list of references on all related legislation and documents to the SEE REM, the paper discusses the expected benefits from the REM establishment, as well as obstacles to its implementation. Similarly, [5] discusses the development of the SEE REM in the context of the seven European REM’s, focusing more on the congestion management and capacity allocation issues of these markets. Further details and analysis on the steps to the electricity market integration in Europe, with an emphasis on the Electricity Regional Initiatives can be found in [6] and [7].

The SEE electricity market is also discussed in [8], where a number of studies are presented related to the process of electricity market opening the SEE region, analysing both regional and country specific issues. Of particular interest is [9], where it is questioned whether the EU model of market reform is appropriate for the SEE region, as reform in developing countries is driven by different reasons than reform in developed countries (i.e. access and reliability vs

¹ The Energy Community Treaty (hereon Treaty) was signed by: the Republic of Albania, Bosnia and Herzegovina, Bulgaria, the Republic of Croatia, the former Yugoslav Republic of Macedonia, the Republic of Montenegro, Romania and the Republic of Serbia, as adhering parties, and the United Nations Interim Administration Mission in Kosovo (UNMIK), pursuant to the United Nations Security Council 1244 (hereon Parties). Note that the status of Bulgaria and Romania has changed from Contracting Party to Participant, after their accession to the EU in 2007. On May 2010, Moldova became the eight full fledged member of the Energy Community, while Ukraine joined in early 2011.

² Classified as a World Bank Technical Assistance Project, the study was co-financed by ESMAP and PPIAF (two multi-donor trust funds).

efficiency). The justification of SEE REM is also addressed in [10], where considering the small size of the local markets, the existing fuel mix in each area and the pattern of demand, the development of the SEE REM seems as the most efficient solution for the region. It is emphasized though that successful market integration can only be the result of careful planning, a sufficient transitory period and the existence of trust among the participants, along with matching strategic interests.

III. SEE WHOLESALE MARKET OPENING STUDY

A. Background

The Treaty foresees the creation of a single REM under stable and harmonized rules that will facilitate electricity trade, competition on a broader geographic scale and investments in the region. In order to achieve this, the Treaty requires the Parties to proceed to a number of reforms. Perhaps the most important one is the opening of the Parties' energy markets for commercial and industrial customers by January 2008 and for household customers by January 2015. Moreover, the vertically integrated incumbents had to unbundle, creating Distribution and Transmission System Operators by January 2007.

Although a specific regional or national electricity wholesale market design is not described in the Treaty, it is expected that at least three conditions should be satisfied: (a) establishment of competitive national markets, (b) full harmonization of the national markets, and (c) establishment of a single mechanism for the cross-border transmission of electricity. Possible measures that could be adopted in this direction are the physical or virtual divestment of incumbent generator capacity, tendering of energy contracts and the development of national/regional Power Exchanges [11].

In 2007, the World Bank offered to perform a study in order to assist ECRB EWG, the body in charge of advising the decisive bodies (the Ministerial Council and the Permanent High Level Group) on statutory, technical and regulatory rules, in the selection of the appropriate wholesale market model for the opening of the SEE REM. The main objective of the Study was the recommendation of a specific regional market design and the development of an action plan for its implementation.

The World Bank held the tender in 2008, won by POYRY and Nord Pool Consulting (hereon Consultants). The Consultants began their work on the Study in early 2009, placed the final draft under consultation in October 2009 and finalized it in July 2010. During this period the Consultants cooperated closely with ECRB EWG, which both supported the Consultant's effort through the provision of the required information and contacts, and exchanged opinions and comments on the proposed Regional Market Design (RMD).

B. The SEE Wholesale Market Opening Study

The Study contains an analysis of the current status of the electricity sector in SEE³ and proposes a specific model for

³ The geographical scope of the Study coincides with the territory of the nine Parties. However, it was clear from the outset that the regional wholesale electricity market may span a broader geographical scope than this.

the regional wholesale market, very close to the current market coupling arrangements applied or planned all across the western European markets, as well as an implementation action plan. As highlighted by the Study, there are potentially significant benefits that can be achieved by improving regional trade, based on the regional generation mix and the import dependency of some countries in the region. The proposed RMD on the wholesale level is expected to assist in this direction.

The Study proposals can be summarized to: (1) structural reforms, (2) market related reforms, (3) establishment of a Regional Day Ahead Market (RDAM), and (4) staged implementation.

1) *Structural Reforms*: The structural reforms can also be viewed as preconditions for the establishment and the efficient operation of the REM and the RDAM. Most of them are explicitly or implicitly described in the "acquis communautaire on energy"⁴ and the Treaty, including:

- TSO unbundling.
- Customer Eligibility to conclude contracts for the supply of electrical energy with producers and suppliers.
- Abolition of full supply⁵ contracts between (public) suppliers and generators.
- Reduction of Market Concentration.

Most of the Parties have adopted the first two measures, while for the other two the Study supports the introduction of a transitory period, where the volume of the existing full supply contracts will be gradually reduced (until completely cancelled) and the public supplier will have to buy the remaining quantities, required to supply its customers, from the market. At the same time it is proposed that local Market Operators set up physical forward markets within their jurisdictions with public firms as market makers. These measures are expected to: (a) decrease the volume of full supply contracts, (b) increase liquidity of the electricity market, and (c) reduce market concentration. The transition scheme for abolishment of full supply contracts regime is illustrated in Fig. 1.

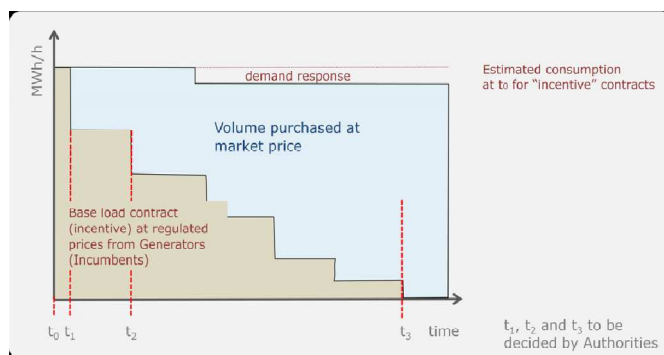


Fig.1. Phasing out of Full Supply Contracts [1]

⁴ As defined in article 11 of the Treaty.

⁵ Where the customer can consume any quantity at a fixed tariff price.

2) *Market Related Reforms*: The market related reforms aim to establish markets and processes which will foster competition in the electricity sector and facilitate entry⁶.

- Establishment of a single mechanism for the allocation of transmission capacity on interconnectors for cross-border trade⁷.
- Introduction of Balance Responsibility and establishment of a Balancing Market/Mechanism.
- Transparency and Market Monitoring.

Initially, cross-border capacity will be allocated explicitly through the SEE Coordinated Auction Office (CAO). At a later stage, short-term (daily basis) allocation for the borders within RDAM will be performed implicitly through market coupling, while CAO will continue to allocate long-term (monthly, yearly) cross-border capacity rights⁸ through explicit auctions.

Balance responsibility has already been introduced by most Parties, coexisting with some form of balancing rules, although only Bulgaria and Romania have operating balancing mechanisms. Ideally, a real time balancing market should be established by each Party. These markets should be harmonized to allow for the introduction of a regional balancing market in the future⁹.

3) *Regional Day Ahead Market*: Before proceeding to its final recommendations, the Study assesses various market design options, including the bilateral model currently implemented in the region. The European model, either as market-coupling (e.g. TLC, between France, Belgium and the Netherlands) or market-splitting (e.g. Nord Pool), was selected as the preferred option. This recommendation offers sufficient flexibility for the accommodation of any level of decentralization each Party may feel as most appropriate for its specific case.

On the technical side, the Study includes the following recommendations for the RDAM:

- Coexistence of the RDAM with bilateral trading and a physical forward market.
- RDAM as the result of local DAMs linked together through the implicit auctioning of cross border capacity. Some jurisdictions may decide not to implement all market functions on their own, but purchase them from the RDAM or other local DAMs¹⁰.
- All cross border capacity will be dedicated to the RDAM, in order to increase liquidity.
- All losses will be purchased from the RDAM, also to increase liquidity.
- Incentives for the participation of demand in the DAM.

⁶ Establishment of National/Regional DAMs is discussed separately below.

⁷ As also required by the Treaty.

⁸ Along with the calculation of the flow-based Available Transmission Capacity of the interconnections.

⁹ A relevant project, BETSEE (Balancing Energy Tool in the SEE) is under consideration among SEE TSOs.

¹⁰ For example, EPEXSpot offers DAM services to both Austria and Switzerland without a local presence represented by a branch office or a similar service. The Austrian electricity market is fully integrated in the German bidding area, while the Swiss market is totally separate and operated by EPEXSpot as a separate instance.

The last three – liquidity related – measures, along with the gradual reduction of the full supply contracts of the public firms, are expected to support the RDAM project during its initial phase of operation, where lack of liquidity has been observed to be the largest obstacle in the efficient operation of a DAM. The RDAM design is illustrated in Fig. 2.

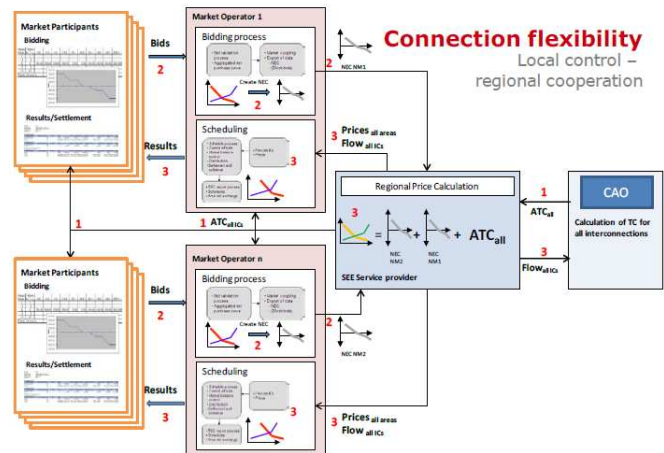


Fig.2. RDAM recommendation [1]

In the future, it is envisaged that the RDAM will be extended, by adding an intraday market, a capacity reserve market and a financial forward electricity market.

4) *Staged Implementation*: Due to the fact that several preconditions for the opening of the wholesale market have not yet been fulfilled by the Parties, the Study recommends a staged implementation of the regional wholesale market with respect to both participating jurisdictions and to market functions. Thus it is recommended that first a “core” should be built, comprised of two or three local markets, where all preconditions are fulfilled¹¹, coupled through implicit auctioning of cross-border capacities. Then, as soon as another (neighboring) Party fulfills the preconditions, develops the necessary infrastructure and establishes the required market processes and organizations, it should be able to integrate with the core. This way, the Parties that feel ready to move on and are interested to lead this effort will not be held back by other Parties that for some reason are reluctant to do so. When the RDAM becomes operational, successful market results and increased operational efficiency will bring more confidence to the non-participating Parties and the desire to join the market. A possible scenario of how this would happen in practice is depicted in Fig.3.

The recommended target completion date for the launching of the RDAM is January 1st 2012, with January 1st 2015¹² being the target date for the full SEE wholesale market opening, including a financial forward electricity market. Meeting this target requires political willingness and strong

¹¹ Romania seems as the most prominent candidate, with Bulgaria following closely. Ideally the third country to join would be Serbia, due to both its location and size.

¹² In line with the relevant target date for full market liberalization mentioned in the Treaty.

support for the necessary changes. Commitment to the action plans from all the stakeholders in the region is vital.

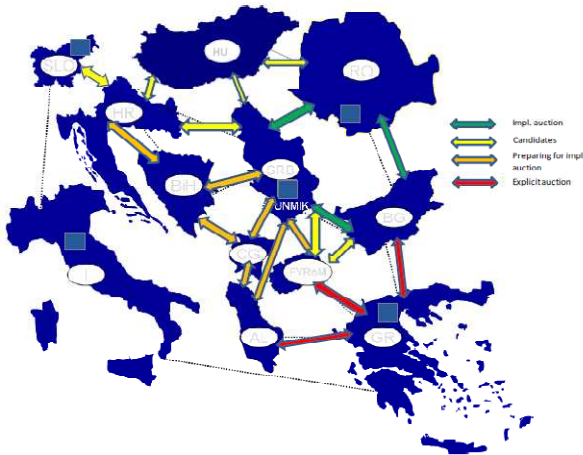


Fig.3. An RDAM expansion scenario [1]

IV. NEXT STEPS

Following the completion of the Study, ECRB EWG reviewed the Study's proposals in detail and identified the necessary steps for their implementation. The result of this work was forwarded to the local Ministries, who were asked for their input by early 2011, especially regarding the proposed RMD and the local requirements for the wholesale market opening as identified in the Study, like TSO and Supplier unbundling, introduction of balance responsibility and increase of transparency.

Since the Parties have signed the Treaty, which includes most of the aforementioned requirements, and have continuously declared their support and will for the SEE wholesale market opening, it is assumed that all structural and market related reforms discussed above will be implemented under any type of RMD.

On the other hand, a key aspect of the Study is the flexibility it provides to the Parties to choose when and how they will participate in the RDAM. Thus, the following key decisions were identified that need to be made by the Parties, based on their available options:

1) Participation in the RDAM

Each Party needs to determine the *degree of cooperation* of its local market with the RDAM. Depending on the size and maturity of each local market, the Parties need to decide on their operation, with options ranging from a branch office to a fully decentralized national DAM.

At the same time, each Party needs to determine *when* it will join the RDAM, thus defining the core around which the RDAM will be built, as well how the RDAM will expand. Specific target dates need to be determined by each Party.

2) RDAM Project Establishment

The delays experienced in the establishment of the CAO, despite the declared support of the Parties, show how crucial are the decisions regarding the organization of the RDAM Project. The Parties, need to decide how the Project will be organized and how they will be represented in the Project

Team, the ownership structure of the RDAM, as well as the details of the project plan, accompanied by a binding timetable. The Project Team shall coordinate the activities of all Parties, making sure that local and regional processes proceed at the agreed pace and most importantly, that all processes, secondary legislation and rules adopted by the Parties for their local markets are harmonized within the SEE region.

3) Local Markets

The Parties have a range of available options for their local market designs, but under the constraint that they should be compatible with the RDAM and need to have certain aspects (like gate closure) harmonized with the other local markets of the region. As an example one could see the differences in the market designs of the Power Exchanges of the Nordic Countries, the Iberian Countries, Italy, France, Germany, Belgium and Holland, which nevertheless plan to couple under the PCR (Price Coupling of Regions) project.

4) Market Monitoring

An important function that needs to be decided beforehand is related to the RDAM supervision. This entity will have the role of performing the monitoring of the RDAM and being on continuous contact with the local regulators. Although the most reasonable choice seems to be ECRB¹³, as it is comprised from representatives of all regulatory authorities of the SEE region, the Parties may decide to form a new, more flexible entity, with significant competences that will report to the ECRB or even directly to the Ministerial Council.

V. ENHANCING THE STUDY'S RECOMMENDATIONS

A. Establishing the SEE Regional Day Ahead Market

The establishment of a Regional Day Ahead Market, combined with the gradual abolishment of full supply contracts and the auctioning of forward contracts to new entrants, will introduce competition to the local markets, currently suffering from high levels of concentration, preventing in practice the opening of the local wholesale markets. The incumbents, currently dominating the local markets, will be only minor players in the regional market, which will have enough players to ensure competition.

Moreover, the RDAM is expected to:

- strengthen regional cooperation,
- increase the regional security of supply and optimize the use of the energy sources,
- improve investment climate,
- launch with enough liquidity to support it, assuming that the measures proposed by the Study are adopted,
- facilitate integration with the other European regional markets, most of them sharing similar market models.

In order to reap the benefits of the RDAM as soon as possible, the Study recommended to the Parties to focus on the quick adoption of the proposed reforms and then, when the

¹³ In the transitional phase, only the regulators of the Parties participating in the RDAM should be represented in the supervising entity. The rest could participate as observers.

requirements mentioned in the Study are met, and independently of the development of the local markets, to couple their local market with the regional market. The establishment of the RDAM will then support the further development both of regional and local markets, thus effectively achieving the goal of the Treaty for full market liberalization by January 1st 2015.

B. Duration of the Transition Period

ECRB EWG, although supporting the establishment of the RDAM, expressed concerns whether the current status of the region can support the tight schedule proposed by the Study.

Indeed, one can easily observe that the current status of the SEE markets is very different from the one in the western EU countries. The levels of trust in the region are still low¹⁴. Market culture isn't developed, leading to reduced confidence in market solutions. Infrastructure levels are poor, requiring significant investments in generation and interconnections for the successful development of the regional market. Obviously these issues are not easy to be dealt with, but as suggested above, could be improved by taking the proper measures.

In this context, the most crucial (political) decision that needs to be taken by the competent authorities, and is implicitly included in the questions posed to the Ministries, is the setting of the target completion date of the RDAM. If this was separated from the Treaty's deadline for the full market liberalization, thus allowing for the transitional period to be extended, then a more smooth transition could be achieved to the target RMD model.

This argument is supported from international experience, with the most prominent example being the development of Nord Pool, the first and by many the most successful regional market in the world. Despite the ideal conditions for the development of a regional market – highly developed market culture, strong and healthy relations between Nordic countries, supply adequacy – it took almost ten years to accomplish complete integration [10]. Of course this happened in the 90s, when electricity trading was a new activity. TLC did realize in just a few months, but this is a totally different case, as not only the above preconditions existed, but there were also national markets in place¹⁵.

The main danger in extending the transitional period is that reforms may take place at a much slower pace, thus not giving the chance to the region to keep up with the evolving market environment of the EU countries and benefit from the regional market. Therefore it is strongly advised that a binding and strict action plan, based on the one in the Study, is adopted, combined with more pro-competitive measures during its length. Successful implementation of this scheme could further enhance the recommendation of the Study and lead to the creation of a competitive environment, facilitating the

¹⁴ As an indication, the Treaty was the first legal binding document that the Parties signed together.

¹⁵ Experience shows that even successfully established markets have difficulties in coupling. For example the first effort of market coupling Nord Pool with EEX was suspended for over a year after 10 days of operation, due to adverse flows and unused capacity despite price differences between the two markets.

establishment and efficient operation of the RDAM. The next two subsections are dedicated to these issues.

C. Pro-Competitive Measures

The Study proposes schemes for the introduction of competition in the local wholesale markets, focusing mainly on the existing bilateral contracts between public suppliers and public generators. These measures, presented under the structural reforms subsection above, have been successful in a number of countries, including Romania, and are mainly meant to support the quick establishment of the RDAM by bringing to the market small, but sufficient, volumes.

In case of planning a longer transitional period, these schemes could be combined with *additional* measures that will attract new entrants to the market and introduce small levels of competition before the establishment of the RDAM. These measures would be decided on a national level and could be any combination of the following:

1) Improvements to Bilateral Trading Practices:

- Publishing of all wholesale bilateral contracts signed by public firms (generators or suppliers).
- New entrants can request the same contract terms with the public firms.
- Thorough auditing of the dominant firm's accounts to prevent anti-competitive practices.

2) Incentives for Generation Investments:

- Introduction of a Capacity Mechanism.
- Tendering of long-term bilateral contracts, preferably for a part of the new investment. This could take the form of Reliability Contracts or similar. These contracts should fit and support the RMD design and include incentives for participation in the market.
- Improved incentives to the TSOs for the promotion of transmission investment¹⁶.

3) Measures for the Reduction of Market Concentration:

- Virtual / physical divestment of generation capacity.
- Capacity or energy swaps between the dominant firm and other EU or (preferably) SEE firms.
- Prohibition to the dominant generator to build new capacity, until market concentration falls below a certain level.
- Dominant generator must publish a binding schedule for the withdrawal of old generation units.

D. Implementation Plan

Assuming the alternative, longer and more flexible, time horizon, more emphasis can be placed on the transitional period and the regulatory measures that need to be adopted during its span. This should allow more time for the reform implementation, harmonization of rules across the region and understanding of the new market environment by the market participants.

Therefore it is proposed that the transitory period should be split into four phases. During each phase, measures for the

¹⁶ See [12].

improvement of the existing trading arrangements (during that phase) should be taken, as well as new reforms should be implemented as pre-requisites for moving to the next phase. Each Party must define from the beginning a specific maximum duration time for the completion of each phase, although it should be able to proceed to the next phase earlier if it feels confident to, on the condition that the predefined action plan of the current phase has been completed.

This proposal aims to the gradual adjustment of each market from its current state, based on bilateral contracts, to the RMD proposed in the Study. Through this process the markets will be given the opportunity to evolve to the desired state, than directly enforcing that state to them.

Phase 1: Establishing Pre-requisites

On the regional level: Decision on the Regional Market Design. The agreement on the RMD must be accompanied by a detailed and realistic implementation plan with specific target completion dates for each Party. Establishment and testing of CAO.

On the national level: Establishment and testing of balancing mechanism. Announcement of a specific transitional period¹⁷ in the end of which tariffs for eligible customers will be cancelled and full supply contracts will be abolished. Measures should be included for the gradual adjustment of the above and the introduction of competition (avoidance of market foreclosure). Announcement of incentives for attracting new investments in generation and transmission. Publishing of required wholesale market information. Appointment of a market monitoring entity. Implementation of measures for the improvement of bilateral trading.

Phase 2: Bilateral Trading

On the regional level: Operation of CAO.

On the national level: Operation of balancing mechanism. Establishment and testing of national DAM¹⁸. Implementation of further measures for the reduction of market concentration.

Phase 3: DAM Trading¹⁸

On the regional level: Establishment and testing of RDAM.

On the national level: Operation of national DAM. Establishment and testing of real time balancing market.

Phase 4: RDAM Trading

On the regional level: Market Coupling/Integration with the RDAM. Expansion of RDAM platforms.

On the national level: Operation of real time balancing market. Expansion of local DAM platforms.

VI. CONCLUSIONS

Europe has set and is steadily moving towards a common electricity market target model, characterized by the market coupling of the existing day-ahead markets in EU countries. Several regional initiatives have been completed or been launched to support the model. This represents a development towards a truly integrated European spot market for electricity.

¹⁷ Independent of the proposed phases.

¹⁸ Only in the case the Party has decided to establish it.

In this context, the EU target model arises as the natural candidate for the future SEE RMD. The current state of the SEE markets though requires the introduction of reforms and the adoption of an optimistic and binding action plan. A Study commissioned by the World Bank presents a good proposal for the SEE region from a market design perspective, but under a tight time schedule. This paper offers ways to enhance the Study's recommendations, aiming to make it more applicable for the SEE region and its current market status.

Whichever RMD is decided in the end by the Parties, the challenge posed to them is considerable. Success is going to enhance cooperation between the countries, increase security of supply and attract investments. Delays in the implementation of the RMD will undermine their EU membership perspective. Moreover they may lose the chance to implement a RMD fitting to the specific characteristics of the region.

ACKNOWLEDGMENTS

The author would like to thank participants at the ECRB EWG meetings and the Consultants for the valuable discussions. I am obliged to Kostis Perrakis for his detailed and insightful comments. All errors remain the author's own responsibility.

DISCLAIMER

The material contained in this paper is for information, education, research and academic purposes only. Any opinions, proposals and positions expressed in this paper are solely and exclusively of the author and do not necessarily represent the views of RAE and ECRB EWG, partially or unilaterally.

REFERENCES

- [1] POYRY and Nord Pool Consulting, "South East Europe Wholesale Market Opening", Final Report, July 2010.
- [2] Sabolic, D., "Issues in Electricity Market Reform in Croatia and the SEE Region", EEM09, Leuven, Belgium, May 27-29, 2009.
- [3] Sabolic, D. and B. Grcic, "Problems in Electricity Sector Restructuring Policies in Some European Countries in Transition", Power Tech 2009, Bucharest, Romania, June 28 – July 2, 2009.
- [4] Karova, R., "Energy Community for South East Europe: Rationale behind and Implementation to date", RSCAS working Paper No.12, 2009.
- [5] Karova, R., "The Eight Regional Electricity Market in Europe – the SEE REM", EEM10, Madrid, Spain, June 23-25, 2010.
- [6] Meeus, L. and R. Belmans, "Electricity Market Integration in Europe", 16th PSCC, Glasgow, Scotland, July 14-18, 2008
- [7] Argueso, J., "From Regional Markets to a Single European Market", EEM10, Madrid, Spain, June 23-25, 2010.
- [8] Pittman, R., L. Stirton and K. Wright (eds), "The Political Economy of Electricity Market Reform in South East Europe", Utilities Policy Special Issue, Volume 17, Issue 1, Pages 1-152, March 2009.
- [9] Pollitt, M., "Evaluating the Evidence on Electricity Reform: Lessons for the South East Europe (SEE) market", Utilities Policy Special Issue, Volume 17, Issue 1, Pages 13-23, March 2009.
- [10] Hooper, E. and A. Medvedev, "Electrifying integration: Electricity production and the South East Europe regional energy market", Utilities Policy Special Issue, Volume 17, Issue 1, Pages 24-33, March 2009.
- [11] Stefanovic, N., "Developing a Regional Wholesale Market. ECRB EWG Views", 11th Athens Forum, Athens, Greece, November, 2007.
- [12] Frontier and CONSENTEC, "Improving Incentives for Investment in Electricity Transmission Infrastructure", November 2008.