

The development of the Target Model requires a coordinated approach on the operation and allocation of the transmission capacity of interconnections. According to the explanatory statement of law 4425/2016, the integration of the European electricity markets shall contribute in the development of the European economy by allowing all European citizens to access low cost electricity resources and therefore minimize the costs of production with a respective maximisation of the benefit for consumers. In addition, apart from consumers, European industry, and thus Greek economy, which is called to compete with economies of other developed countries, shall benefit.

Course of reorganisation of the Greek wholesale electricity market

The reorganisation of the Greek wholesale electricity market falls, therefore, within the framework of EU policy towards the completion of the internal European electricity market and the adoption of common mandatory regulations for its organisation and operation at European level, according to the terms and regulations applicable to the rest of the European countries. For the purpose of said reorganisation the Regulatory Authority for Energy (RAE) along with the Independent Power Transmission System Operator (ADMIE) and the Electricity Market Operator (LAGIE), under the three-party workgroup which operates for the compliance of the Greek electricity market with the European Target Model, assigned on April 2014 to the international consulting company "ECCO International Inc." a study on the principles of design as well as on drafting on a roadmap for the adjustment of the internal electricity market to the requirements of the EU Target Model. The broad lines of said adjustment, which were partially implemented in the provisions of law 4425/2016, include the following:

- introduction of forward markets
- introduction of off-market bilateral contracts between producers and suppliers
- maintenance of central planning and real-time dispatch of production units by the System Operator (ADMIE), as well as bidding offers per unit (i.e. not per unit portfolio), given that the Public Power Corporation (PPC) is the dominant producer within the Greek wholesale market, owning a differentiated production portfolio (including lignite, hydroelectric plants and natural gas plants) in contrast to independent producers (exclusively from natural gas plants)
- change of the method of resolving the Day Ahead Schedule (DAS) by removing the technical limitations of the Transmission System and the production units from the resolving of the day ahead market, in combination with the establishment of an intra-day market, within which the participants shall be able to adjust their net positions, in order to avoid penalties due to the imbalances between their bids and the real-time sold / purchased quantities
- establishment of a balancing market with offers for increase and reduction of production from the production units as well as offers for increase and reduction of consumption for the balancing of realtime production and consumption

- settlement of imbalances per unit and per unit portfolio (for each supplier)
- gradual shift of responsibility regarding the RES production forecast from the System Operator to RES producers, as well as gradual introduction of market based RES production.

Within this framework, law 4425/2016 progressively implements the Target Model by introducing new wholesale electricity markets. The reorganisation of Greek wholesale electricity market in line with the terms and regulations applicable to all European countries is essential for Greece to participate in the integration of markets (firstly with Italy) and make electricity import and export through “implicit auctions” easier. In any European country with liberalised electricity market, physical delivery products, including reserves, are traded in different time levels, from long-term to real-time. Therefore, under the new framework, four wholesale markets shall operate, (a) wholesale forward market and bilateral OTC market, (b) day ahead market, (c) intra-day market and (d) balancing market. With regards to the time levels of operation of the abovementioned markets, wholesale forward market shall be first, day ahead market second and afterwards intra-day market and balancing market.

#### New electricity markets

More specifically, within the wholesale market of forward power products participants trade on forward products of electricity with the obligation to physical delivery. In addition, there is the option of purchasing and selling forward products off-market, through bilateral contracts. With regards to the transactions through bilateral contracts, it is provided for that RAE is entitled to determine maximum rate for such transactions as a measure to counterbalance the dominant corporation (i.e. PPC), in order not to excessively restrict the liquidity of the day ahead market, which is called to provide the sign of prices of electricity corresponding to real conditions of offer and demand. For the performance of transactions using forward products, the energy quantities traded shall be stated within the framework of the day ahead market, in order to determine the “net position” of each participant. LAGIE shall be the Operator of said Market for at least the first years of its operation, according to article 9 of law 4425/2016. In addition, RAE following three years from the start date of the operation of this market will have the option to suggest to the Minister of Environment and Energy to appoint even more legal persons as Operators of this Market apart from LAGIE, provided that they observe specific requirements, for example that they have the required financial resources to fulfil their obligations, the necessary technical structure and they provide their services cost effectively.

Furthermore, in the day ahead market the participants trade electricity quantities to be physically delivered on the day ahead, with the only limitation that, for the producers, the quantity of electricity tradable is limited by the power of their units, whereas, for the load representatives, the quantity of electricity tradable is limited by the total load represented

and the quantity of electricity purchased and within the wholesale forward market. According to Regulation (EU) 2015/1222, Nominated Energy Market Operator (NEMO) is appointed as Operator of the day ahead market. Within the intra-day market, participants trade remaining quantities of energy, limited by the power of their units, the quantities traded and sold at the wholesale forward market and at the day ahead market, and also limited by any restriction deriving from the balancing market.

According to the provisions of article 5 of the Regulation (EU) 2015/1222, in Greece, the Operator of the transactions of the day-ahead and the intra-day market has a statutory monopoly. Pursuant to decision of the Minister of Environment and Energy dated 11.12.2015 (Government Gazette no. B 2678), LAGIE was appointed as NEMO for four years. Following the end of the abovementioned time period, Greek NEMO shall be appointed with a decision of RAE, according to article 10 para 2 of law 4425/2016.

Finally, balancing market consists of (a) the power balancing market, which is the market in which the power offered is maintained by the participants for a predefined time period, in order to cover reserve demands of the System, and (b) the energy balancing market, in which the electricity offered by participants is used by the Transmission System Operator in order to maintain the frequency of the System in a predefined level and the forecast balance for electricity production and demand, having regard to the electricity exchange programs with neighbouring countries.

Participants are required to submit offers with the requirement of physical delivery of the total of the available power. The Transmission System Operator is responsible for the operation of the balancing market according to Balancing Market Code and Operation Code of the System.

Characteristics of new markets and the role of their Operators

Under the operation of the abovementioned markets, Organised Trading Facilities are formed and new wholesale energy products with physical delivery will be traded, according to the provisions of REMIT Regulation [Regulation (EU) 1227/2011 of the European Parliament and Council for the integrity and transparency in wholesale energy market].

Such energy products are excluded from the meaning of “financial instruments”, as defined in Directive 2014/65/EU (MiFID II). As a result, new wholesale markets shall not be financial markets, under the meaning of the provisions of law 3606/2007 and Operators of the said Markets shall not be subject to the requirements of article 42 of law 3606/2007 regarding 43 the amount of their share capital and the exercise of control from the Capital Market Commission.

It is considered that the operation of the four new markets shall (a) allow the participants to hedge their risk through forward market, by progressively readjusting their positions, in order to form more competitive products for the final consumers in the medium and long term, (b) through the participation in intra-day markets participants shall be able to adjust

their positions and to avoid charges for non-compliance and, on the other hand, the value of the flexibility of units will be better reflected within the market, and not be determined solely with administrative acts through payment for the provision of ancillary services. According to the provision of article 8 para 4 of law 4425/2016, transactions conducted within the abovementioned markets are subject to Greek law, whereas for dispute resolutions the courts of Athens have jurisdiction. With the introduction of the new regulatory framework the question of coverage of the transactions deficit is addressed. Market Operators are responsible for the coverage, settlement and clearing of transactions, in order to protect the market from deficits. For the fulfilment of this obligation, Operators may request participants to provide guaranties and also establish a joint guarantee fund financed with contributions of the participants. At the same time, Operators may propose to RAE that a legal person be certified as operator for the settlement, clearing and coverage of transactions. Operators may also establish or participate in such legal person. Due to the fact that the role of the operator for the settlement, clearing and coverage of market transactions is very important for the balanced operation of the internal electricity market, special requirements are set regarding the economic, technical and other resources required for the continuous and uninterrupted provision of its services, which shall be further refined through decision of the Minister of Environment and Energy. On 15.2.2017 LAGIE and ATHEXGROUP already signed a cooperation memorandum, in order to adopt a business plan for the establishment of a new joint company responsible for the risk-taking of clearing and coverage of markets as central counterparty.

#### Start of operation of the new markets

Provisions of law 4425/2016 regarding the operation of the new markets are not detailed. Such details remain to be further defined by the public administration through relevant Codes referring to the participants, their conduct within the markets, the cooperation framework between them and Market Operators, as well as the legal nature of their relations and the procedures of coverage, settlement and clearing of transactions. Codes shall be drafted by the Operator of each Market, according to the provisions of article 14 of law 4425/2016, they shall be submitted to RAE, RAE shall set them under public consultation, evaluate, modify and finally issue through decision which will be published in the Government Gazette. With regards to the start of operation of the new markets, article 6 para 3 of law 4425/2016 provides for that it shall be set through decision of the Minister of Environment and Energy following opinion of RAE, provided that the Codes of Operation of the Markets have been previously issued. Article 16 of law 4425/2016 provides that until intra-day electricity markets coupling is achieved, according to Regulation (EU) 2015/1222, LAGIE shall be the Operator of intraday Market, whereas the Transmission System Operator, i.e. ADMIE, shall be the Operator of balancing Market. As for the roadmap for the start of operation of the new markets, it must be noted that law 4425/2016 does not contain

any relevant provision regarding the individual tasks to be completed, like introduction of Codes, consultations and the approval of Codes.

Such roadmap contained in the law would be useful as a recommendation to the parties involved to promptly proceed to specific actions. Despite the fact that the “energy MoU” of fall 2016 between the government and the institutions provides for that the start-up of new markets must take place until the end of 2017, therefore drafts of the Codes must be ready until summer of 2017, however, the real time of their completion and operation is not certain yet, which complicates the medium and long term planning of energy corporations.

*Source: EnergyWorld*