

Turkey: Turkish Electricity Market: Steps Towards Liberalization

Last Updated: 11 June 2010

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INTRODUCTION

Since 2001, Turkey has been in the process of liberalizing its electricity market. The ultimate purpose of this process is to create a fully liberalized system where the state acts only as a supervisory and regulatory authority instead of an investor in the market. Having a state monopoly in the electricity market for a long period of time, Turkey has made and still has to make considerable effort to achieve this ultimate purpose. In this respect, the state has to privatize its generation and distribution facilities and also ensure that new investments are made by private investors to create and maintain a balance between demand and supply of electricity.

This article will analyze Turkey's efforts to create a fully liberal electricity market. The below analysis consists of three sections. In the first section, the history of the Turkish electricity market and the liberalization efforts made before the enactment of the Electricity Market Law dated February 20, 2001 and numbered 4628 (the "EML") will be explained. In the second section, the current structure of the electricity market will be described and the last section will comprise a brief overview of the contemplated steps to be taken towards liberalization.

I. HISTORY OF THE TURKISH ELECTRICITY MARKET

Until 1970, generation, distribution and transmission of electricity were not conducted by a single state authority. There were separate electricity generation facilities established by the state and most of the distribution activities were conducted by municipalities. In 1970, the Turkish Electricity Institution was established and all of the generation, distribution and transmission activities were assigned to the Turkish Electricity Institution. From 1970 to 1984 all activities in the market were conducted by the Turkish Electricity Institution. Until 1984, there was a monopoly of the state in the electricity market, no private investments were allowed in the electricity market during that period.

The magnitude of investments required to build the electricity production facilities necessitated private capital in the electricity market. In order to allow private capital to enter into the electricity market, the Law dated December 04, 1984 and numbered 3096 on Assignment of Electricity Production, Transmission, Distribution and Trade to Establishments other than Turkish Electricity Institution (the "Law No.3096") was enacted.

The efforts to abandon the state monopoly continued with the demerger of the Turkish Electricity Institution into TEAŞ and TEDAŞ in 1993. The purpose of this demerger was to create different companies engaging in different stages of activities in the electricity market and to facilitate the privatization procedure.

In order to attract more private capital, the Law on Procurement of Certain Investments and Services through Build-Operate-Transfer Model dated June 08, 1994 and numbered 3996 (the "BOT Law") was enacted. The BOT Law stipulated a system where private investors were granted the right to build a production facility, operate the facility for a specific period of time, sell the electricity generated during such time to the state and then transfer the facility to the state. However, in 1996, the Constitutional Court ruled that generation of electricity made according to the BOT Law was in the nature of a concession. As a result of this decision, the State Council became authorized to review and request revisions in the agreements signed between the state and investors under the BOT Law which discouraged the international investors and financiers.

In order to eliminate the negative effects of the decision of the Constitutional Court, the Law on Establishment and Operation of Electricity Production Facilities through Build-Operate Model and Regulation of Energy Sales dated July 16, 1997 and numbered 4283 (the "BO Law") was enacted. The aim of the BO Law was to enable TEAŞ to open tenders and receive bids from the investors. The winning investor was granted an authorization to build an electricity generation facility and sell the generated electricity to the state for a specific period of time. The difference from the BOT Law was that the generation facilities belonged to the investors and not to the state. The purpose was to ensure that agreements between the state and investors would not be structured in the form of concession agreements and therefore would not be subject to the review of the State Council.

Treasury guarantees were granted by the state to electricity producers under the BOT Law and the BO Law in order to secure payment for the electricity the state undertook to purchase for a specific period of time which created an extra burden on the state.

Despite the efforts to create a liberal market, the market was still dominated by state-owned companies. The need for a new system was crystal clear which led to the enactment of the EML which is still in effect. The EML foresees a system where the state acts only as a supervisory and regulatory authority, and production, trade and distribution of the electricity is conducted by private entities. Only the transmission activity is conducted exclusively by the state through a state-owned company called TEİAŞ.

In order to achieve this purpose, the state companies engaged in electricity activities must be privatized. In order to facilitate the privatization procedure, TEAŞ was demerged into EÜAŞ, TETAŞ and TEİAŞ in 2001. Moreover, 20 companies, each of which is authorized to engage in distribution activities in the relevant distribution areas, were established under TEDAŞ.

II. CURRENT SYSTEM

As briefly mentioned above, the EML foresees a system where the state acts only as a supervisory and regulatory authority. The EML aims to create a competitive electricity market where private actors will make the investments. Pursuant to the EML, in order to engage in an activity in the electricity market, a license must be obtained from the Electricity Market

Regulatory Authority (the "EMRA"). Under the EML, the licenses which can be granted by the EMRA are as follows:

- i. Production license,
- ii. Auto-producer license,
- iii. Auto-producer group license,
- iv. Distribution license,
- v. Transmission license,
- vi. Wholesale license, and
- vii. Retail license

Within the activities subject to the licenses stated above, only the transmission activities will be conducted by state through a state-owned company called TEİAŞ.

Only joint stock companies or limited liability companies can be granted a license by the EMRA. Pursuant to the EML, licenses cannot be transferred to a third party. In order to by-pass this restriction, in practice, not the licenses but the companies which have been granted licenses are transferred to third parties. Limited number of production licenses granted in the renewable energy sector made such licenses a highly valuable asset and some of the actors in the market used such licenses as a tool of trade. Lots of companies obtained licenses without building the necessary production facilities. It was understood that the main purpose of the owners of the licensed companies was not to build facilities, but just to sell their licensed companies with a good price. In order to avoid such a situation, an amendment was made to the Electricity Market Law in 2008 and according to such amendment, if a licensed company cannot establish its facilities and start to generate electricity within the period stated in its license, its license is cancelled.

After the enactment of the EML, private investors were more interested in production activities. Yet, the amount of investments was not as high as expected. The main reason for this was lack of assurance of sale of generated electricity with a good price. Under the current system, no treasury guarantees can be granted for the sale of electricity by private investors, and TETAŞ which is a state-owned electricity trade company is not allowed to enter into energy purchase agreements for longer than one year. Therefore, under the current system, price of electricity and periods of energy purchase agreements are determined in accordance with the dynamics of the free market created by the EML.

Under the current system, licensed companies can enter into bilateral energy purchase agreements between themselves or with third parties. Bilateral agreements are not subject to the approval of the EMRA. Electricity prices, sales conditions, agreement periods can be determined freely in those agreements. The aim of the EML is to make the market of bilateral agreements the main market for the sale and purchase of electricity. However, the balancing and settlement system which is created by the EML to ensure the balancing of offer and demand of electricity in the market also established a supplementary market.

The balancing and settlement system consists of the day ahead balancing market and the real time balancing market. The centre for financial settlement in the market ("PMUM") is responsible for the day ahead balancing. Under the day ahead balancing mechanism, each day until 11:30 a.m., the electricity producers submit their estimates regarding their production for every hour of the next day. Consumers also submit their estimates regarding their consumption for every hour of the next day. The purpose is to make a good estimation of the offers and demands to be realized in the market on the next day and to make the necessary arrangements for the balancing between such offers and demands a day in advance. All of the price offers are gathered by PMUM which uses a program to determine the combination of the offers that will be of minimum cost to the system. PMUM then determines a System Day Ahead Price which will be applied to the purchases to be made by PMUM and gives instructions to the producers and consumers to increase/decrease their production/consumption of electricity in order to balance the offer and the demand of electricity.

Even if the day ahead balancing system aims to ensure the balance between offers and demands, the estimates do not always work as they are supposed to; a production facility may fail to provide the system with the amount of electricity that it committed, a consumer may have a sudden need for more electricity in a considerable amount, or a technical problem may occur in the transmission system. In order to avoid shortages in the system in such cases, the real time balancing system is created. The offers made in this system must be realized within 15 minutes as of the time requested by the system operator.

III. CONTEMPLATED STEPS TO BE TAKEN FOR LIBERALIZATION

As mentioned above, major steps have been taken towards liberalization of the electricity market to date. However, further developments are yet to be made to ensure the full liberalization of the electricity market; the legislation currently in effect fails to respond to the needs of the sector and there are still a lot of state-owned companies which are active in the electricity market. Therefore, revisions must be made to the current legislation so that more investments can be made in the electricity market and state owned companies must be privatized so that the state will withdraw from the market entirely.

The actors in the electricity market have been quite busy with lobbying activities to ensure that revisions are made in the EML, the Mining Law dated June 15, 1985 and numbered 3213, the Law on Utilization of Renewable Energy Resources for the Purpose of Generating Electrical Energy dated May 10, 2005 and numbered 5346 (the "Renewable Energy Law") and certain other laws related to the electricity market. Most of such lobbying activities take place in the renewable energy sector. The Renewable Energy Law aims to draw the attention of investors in the energy market by offering an attractive environment to investors engaged in the production of electricity through the use of renewable energy resources. A purchase-guarantee system is foreseen under the Renewable Energy Law where the electricity generated by using renewable energy resources are guaranteed to be sold over a certain price to the private consumers in the market. However, the Renewable Energy Law in effect, failed to be a center of attraction for investors willing to invest in the renewable energy sector, since the

prices determined in the Renewable Energy Law (i.e. Euro Cent 5 /kWh - Euro Cent 5,5 /kWh) are much lower than the prices in the free market. Because of this situation, the purchase-guarantee system is not used by any of the actors in the relevant sector. This flaw in the system indicated a need for determination of higher prices for the purchase-guarantee system. Therefore, a proposal to amend the Renewable Energy Law was submitted to the relevant commission of the Grand National Assembly of Turkey (the "Proposal"). Under the Proposal, different purchase prices varying from Euro Cent 7/kWh and Euro Cent 25/kWh are determined for electricity produced from different types of renewable energy resources. The current minister of energy and natural resources stated that the prices suggested in the Proposal were too high. Therefore, it is expected that the Proposal will be revised and lower prices will be determined for the purchase-guarantee system. Yet, even after such revisions, it is expected that the prices to be set will be much higher than the prices stated in the current version of the Renewable Energy Law.

The electricity market has been under a privatization process after the enactment of the EML. Within this context, 3 of the distribution companies established under TEDAŞ have been completely privatized and tenders of 8 other distribution companies under TEDAŞ have been awarded to private investors but are still pending for final approvals. The remaining companies will soon be privatized. The privatization procedure has also started for the electricity generation facilities owned by EÜAŞ which is a state-owned company engaging in electricity generation activities. 9 portfolios have been created consisting of different electricity generation facilities. 3 of such portfolios consist of only thermal power plants, 4 of them consist of only hydroelectric power plants and 2 of them consist of thermal and hydroelectric power plants. All of the portfolios are planned to be privatized in the near future.

CONCLUSION

The EML is a milestone in the liberalization process of the Turkish electricity market. Within 9 years after the enactment of the EML, Turkey has made considerable developments to create a liberal market where only private actors make investments in a competitive environment. All of the efforts made so far have to be appreciated. On the other hand, it must also be accepted that there are more steps to be taken towards the full liberalization of the market. Nevertheless, the responsive approach of the authorized bodies of the state to the needs of the sector encourages impression that Turkey is determined to take the necessary steps to pull the state out of the market and ensure constant entrance of private investors into the market.