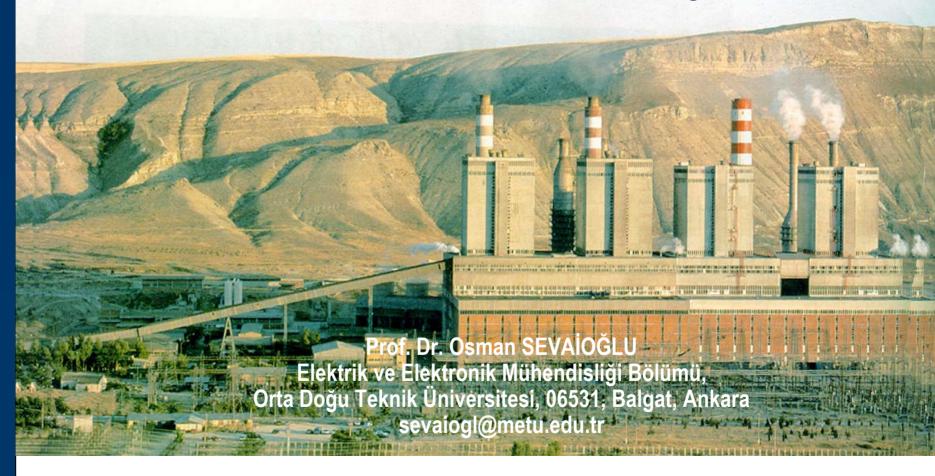
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## **Subsidies in Wholesale Electricity Markets**



#### The Main Driving Force behind Deregulation

The main driving force behind deregulation is the challenging financial problems in realizing energy projects

- Energy projects require huge investments with a large amount of financial resources
- Public resources on the other hand, are getting more and more scarce and difficult to achieve, due to severely demanding social conditions and constraints

### **Electricity as a Public Service**

In many developing countries, including Turkey, electricity was regarded as a public service, mainly due to social considerations during the last decades, for the sake of;

- (a) realizing energy projects with mostly nonprofiting characteristics, by using public resources,
- (a) making subsidy to the energy tariffs of those parts of the society with low level of income,

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#### **Electricity** as a Public Service

The main objectives of this type of political attitute are;

- (a) to compensate the deficiency in the investment needed for the energy sector by using public resources, -that must otherwise be realized by the private investors-, at the expense of neglecting other vital public services, such as defence, security, justice and public health,
- (a) To be politically popular and successful in the next election

#### **Definition of Public Services**

Public services are regular and continuous activities carried out either by public authorities or under the supervision of public authorities in order to meet the general and mutual needs of the society within the direction of the public interests and benefits<sup>(\*)</sup>

<sup>(\*)</sup> Decision of the Turkish Constitutional Court 28. 02. 1996, E; 1994/71 (K); 1995/23 (E)

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#### Public Services that are never to be deregulated;

- National Defense (Army),
- Metropolitan Security (Police),
- Justice

Present point of view in terms of the general principles of deregulation is such that all other public services can partially or fully be deregulated,

including education, public health and municipality services

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#### **Electricity is a Public Service**

Electricity is regarded as a public service, since it fully satisfies the above definition

Electricity services are conducted either by public authorities or by private enterprises under the supervision of public authorities

# Legal Framework for Deregulation of Electricity Services

## Turkish Constitutional Law, Article 168; Exploration and Operation of Natural Resources

- Natural wealth and resources are under the control and at the disposal of the Government
- The right to explore and operation of natural wealth and resources belongs to the Government
- The Government may delegate this right to private enterprises (only) for certain periods of time

## Turkish Constitutional Law, Article 168 concerning **Exploration and Operation of Natural Resources**

Of the natural wealth and resources, those to be explored and managed by the Government in partnership with/or private enterprises are subject to the explicit permission of the law

## <u>Turkish Constitutional Law, Article 168</u> <u>Exploration and Operation of Natural Resources</u>

The conditions to be fulfilled in exploring and managing the natural wealth and resources by private enterprises and the procedure, principles governing supervision and control by the Government and the sanctions to be implemented are prescribed by law

## Legal Framework for delegating Public Services to Private Enterprises

According to the Article 168 in Turkish Constitutinal Law, Public services may be delegated to private enterprises;

- (Only) for a certain period of time,
- Through a Concession Agreement

Hence, transfer of ownership of the property for exploration and/or operation of the public natural wealth and resources is legally impossible



#### Possible Deregulation Models for the Turkish Energy Sector;

TOR (Transfer of the Operation Right) → For distribution networks, generating plants with

Vesting Contracts

BOT (Build Operate and Transfer) → For generating plants until

2001

BO (Build and Operate) →

Licenced Generation →

For generating plants with imported fuel until 2001 For generating plants after 2001 with respect to the Law 4628

Please note that the BO and BOT models are no longer valid, since the enactment of the Law 4628 in 2001

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#### **Customer Conditions**

- o Constant voltage →
- Constant frequency →
- o Reasonable price →

Availability of supply

Investment for transmission and distribution infrastructure

Investment for generation infrastructure

Investment for utilizing domestic natural energy resources or making subsidy to tariffs

(Continuity of supply) → Investment for all of the above



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#### **Customer Conditions**

The last condition is the most critical:

Continuity of supply: Availability of electricity

Electricity must be available at all times, under all system operating conditions, regardles of the price

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#### **Customer Conditions**

Continuity of supply: Availability of electricity

The primary concern is for "the available of electricity"

Hence, contrary to the general belief, "cheap electricity" is of a secondary concern

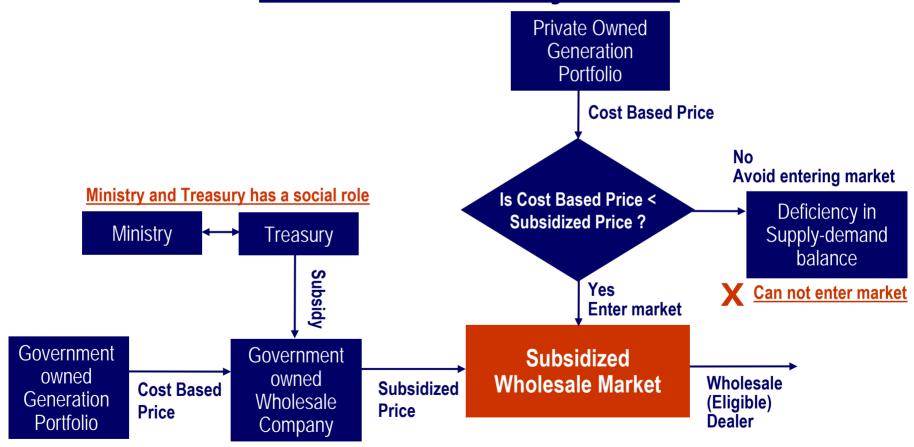
#### **Customer Conditions**

Fulfilment of customer conditions is of a social and hence a political concern

Politicians are sensitive to fulfil the customer conditions for the sake of their political career

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## Diagram for entering a Subsidized Wholesale Electricity Market

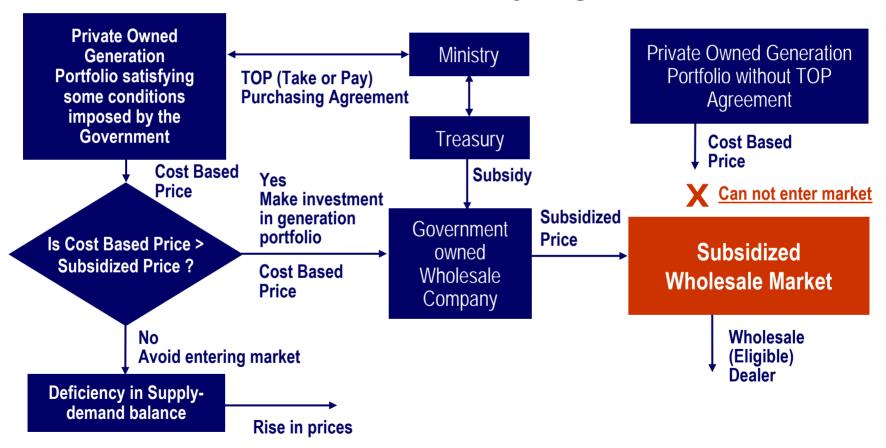


13. Saudi Technical Exchange Meeting, KFUPM, Dhahran, April 29-30, 2008, Prof. Dr. Osman SEVAİOĞLU, 17/20

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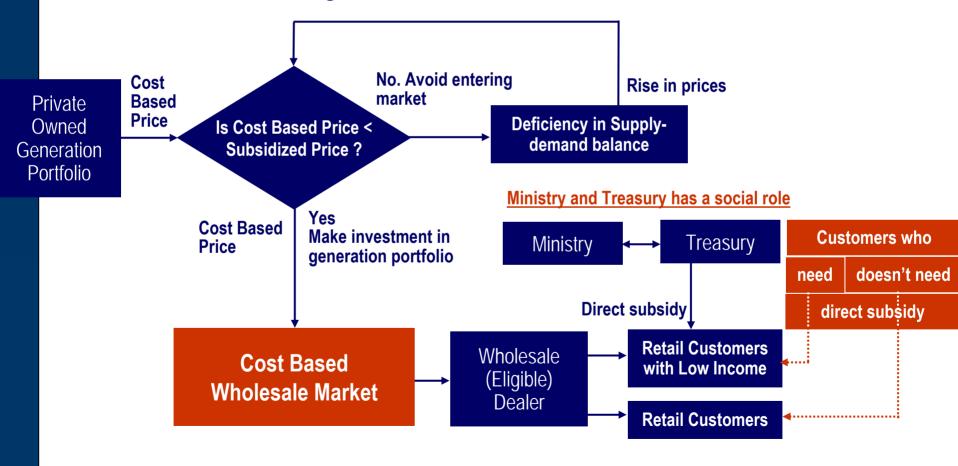
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#### <u>Diagram for a Wholesale Electricity Market</u> <u>with TOP (Take or Pay) Agreements</u>



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#### <u>Diagram for a fully Deregulated Wholesale</u> <u>Electricity Market (Cost Based Tariff Model)</u>



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#### Prospectives of the Turkish Electricity Sector

- Transfer the operating rights of the the Government-owned generation, distribution assets and deregulate the wholesale trading activity within the lines of AB Directives;
- To regulate the distribution, retail trading and transmission activities by an independent regulatory authority,
- To establish a deregulated, competitive, wholesale electricity market, operating on cost based tariffs