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BOSNIA-HERZEGOVINA

Preconditions to an Electricity Market

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James A. Schmidt

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OVERVIEW

I. Basic Points

II. Types of Markets

III. Creating a Market Design

IV. Conclusion



I. BASIC POINTS

- ▶ “Market” *Implies Transaction*
- ▶ Market: a real or virtual place where transactions occur
- ▶ *Transaction:*
 - A. **Agreement**
 - i. Offer
 - ii. Acceptance
 - B. **Exchange**
 - i. Performance
 - ii. Consideration



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I. BASIC POINTS

Performance of Transactions:

1. Immediate

Bread \longleftrightarrow €

2. Over Time

Example One

(100 MW/hr) x 12 hrs/Day x €25/MWh

30 days



*** Payment €9,000**





I. BASIC POINTS

Performance of Transactions (continued):

2. Over Time

Example 2

Buy Car





I. BASIC POINTS

Market Participants *Must*:

- ☑ **Agree** Transaction **Fair**
- ☑ **Perform** As Agreed
- ⊗ Theft and Non-Performance are **Not** “Market”
- ✓ **Businesses Must Incorporate Risk Mitigation Steps into Deferred Performance Contracts**



II. TYPES OF MARKETS

1. Free Trade

- Bilateral Negotiated Contracts
- Usually within Regulatory Framework

2. Regulated Prices and/or Terms

- Full Economic Regulation of Seller or Buyer
- Usually Some Free Choice by Both Parties

3. All Markets Part Regulated, Part Free



III. CREATING A MARKET DESIGN

A. Government to Identify and Establish Policy Balance

B. Recognize Existing Sector Strengths and Shortcomings

- ▶ **Political?**
- ▶ **Economic?**
- ▶ **Other?**
- ▶ **Technical?**
- ▶ **Legal?**



III. CREATING A MARKET DESIGN

C. Identify Market Design Options and Develop Appropriate Hybrid Market Design for Specific Circumstances

- ✓ Consider current market strengths and shortcomings
- ✓ Incorporate balanced Government policies
- ✓ Perform cost-benefit analysis of options
- ✓ Finalize “ideal” market design
- ✓ Today’s ideal market design is a transition step

D. Implementation Plan and Process is Key to Success



III. CREATING A MARKET DESIGN

Possible **Implementation Steps** Under Some Market Design Options:

- ☑ Establish an Independent *Electricity Market Regulatory Authority* with Monitoring and Enforcement Powers
- ☑ Completely *Unbundle* Generation, Transmission and Distribution (Including Wires from Network Operations)
- ☑ Designate an Independent *Transmission Grid Owner* (TO), *System Operator* (SO), *Market Operator* (MO)



III. CREATING A MARKET DESIGN

Possible **Implementation Steps** (continued):

- ☑ Designate an Independent *Distribution System Operator* (DSO), and Regulated *Public Supplier*

- ☑ Implement Transparent *Regulatory Accounting Systems*

- ☑ Provide for *Dispatch and Balancing* According to Published, Objective Criteria



III. CREATING A MARKET DESIGN

Possible **Implementation Steps** (continued):

- ☑ Ensure *Third Party Access* to Transmission and Distribution Systems
- ☑ Develop and Implement *Authorization and Tender Procedures* for Additional Generation
- ☑ Complete *Market Opening* at Direct Connection Level and Further by Voltage Level when Ready



IV. CONCLUSION

- Every Electricity Market Requires Mutually Beneficial Exchanges Between Market Participants, including *Retail Customers*
- Numerous Market Structure Options: Must Consider *Explicit Policy Balance* and Current *Strengths and Constraints* when Designing New Market Model
- A Phased Transition will Protect the Safety and Security in Energy Supply to Customers



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James A. Schmidt

Hunton & Williams LLP

951 East Byrd Street

Richmond, VA 23219

Phone: +1 (804) 788-7398

Fax: +1 (804) 343-4732

Email: JSchmidt@Hunton.com