



Overview of Trading Arrangements in South Africa

Trading Arrangements in South Africa

- Electricity Industry Structure
- Electricity Industry Statistics
- Government Policy
- Regulatory Environment
- Current Trading Arrangement
- Medium Term Trading Environment

Industry Structure

- National Utility (Eskom)
 - State owned
 - Vertical Integrated
 - Transmission
 - Distribution
 - Generation
- Large Customers with Co generation
- Municipalities
 - 174 Licensed municipalities

Industry Statistics

- National Utility (Eskom)
 - Generation
 - Coal fired – 32066 MW + 570 MW
 - Gas Turbines – 342 MW
 - Hydro – 600 MW
 - Pumped Storage – 1400 MW
 - Nuclear – 1800 MW
 - Total 36208 MW + 570 MW
 - Transmission (> 132 kV – 765 kV)
 - 27169 km
 - Distribution
 - 42988 km (33kV – 132 kV)

Industry Statistics

- National Utility (Eskom)
 - System Peak Demand
 - 34195 MW (2004)
- Independent Power Producer
 - Cahora Bassa (2000 MW)
- Non Eskom Generation
 - 2615 MW

Government Policy (Previous)

- Formation of 6 Redistributors
- Unbundling (separation) of Transmission
- Competitive Electricity Market
 - Multi Market Model
 - Formation of a Power Exchange
 - Creation of 7 Eskom Generation Clusters
 - Privatization of 30% of Generation
- Power Exchange
 - Created by Eskom Initial Market Operator
 - Subsidiary and then independent company
 - Eskom Power Pool designed and operated according to the Regulatory approved competitive multi-market design

Government Policy (New)

- Formation of 6 + 1 Redistributors
 - 6 large Metros
 - 1 National Distributor (Eskom +)
- No Competitive Electricity Market
- No separation of Eskom Transmission
- Private Public Partnerships
 - Eskom to enter into Power Purchase Agreements (PPA's) with Independent Power Producers (IPP's)
 - In time 30% of Generation to be provided by IPP's

Government Policy (New)

- Change of Policy resulted in
 - Eskom changed 7 Generation Clusters into 4
 - Eskom Power Pool into a cost based co-operative pool
 - Dismantling of the Power Exchange

Regulatory Environment

- National Energy Regulator (NERSA)
- Regulate Energy (Electricity and Gas pipelines)
- Regulation of Eskom
 - Transmission, Distribution and Generation licensed separately
 - Incentive Based Regulation for Transmission
 - ROR methodology for Generation and Distribution
 - Multi Year price determination (3 years)

Current Trading Environment

- Eskom sells to South African customers on Regulatory approved
 - Basket of Tariffs
 - Special deals
 - Wholesale Electricity Pricing System (Distributors and other large customers) – WEPS
 - Separation of Energy and Infrastructure
 - TOU tariff for Energy
 - Transmission Tariff
 - Network Charge
 - Reliability Charge
 - Losses Charge
 - Connection Charge
- Trade with the SAPP is unregulated except for Transmission

Current Trading Environment

- **Connection to Transmission system**
 - License provide for non-discriminatory access for all licensed entities
 - Grid Code provide access and connection conditions
- **Internal to Eskom**
 - Eskom Power Pool provide the Trading mechanisms for internal Trade (Trade between Eskom entities)
 - Regulator require that Transactions between Eskom Generation, Distribution and Eskom Transmission are at the same prices levels as the Tariffs applicable to wholesale external customers – WEPS

Medium Turn Trading Environment

- Introduction of Independent Power Producers on a large scale (30%)
- Eskom will act as a Single Purchaser and buy from own Generation and approved IPP's
- Eskom will stay vertically integrated
- Restructuring of EDI
 - 6 Metro REDS
 - 1 National RED (Eskom +)
 - Ownership of National RED to be determined
- Eskom Power Pool
 - Change to a cost based co-operative Pool used for scheduling and dispatching



THANK YOU