#### The Question of Sovereign Guarantee for the Development of Electricity Generation in Ethiopia

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### Four parts of the Presentation:

- Policy, Legal and Regulatory Frameworks of the Ethiopian Electricity Sector
- Issues of Sovereign Guarantee and Risk
   Allocation for Electricity Development
- The Ethiopian Experience on Cases of Sovereign Guarantee and Risk Allocations
- **\* Conclusions and Recommendations**

#### Part I

Policy, Legal and Regulatory Frameworks of the Ethiopian Electricity Sector

# **National Policy Frameworks**

- National Economic Policy, introduced
   1991
  - Strategies for the Development of Industries, 2002
- **\* National Energy Policy, 1994**
- \* Water Resource Management Policy, 1998
- & Rural Development Strategy and Policy, 2002

### Legal Frameworks

- The 1987 FDRE Constitution Supreme Law of the Land
- \* Proclamations:
  - Electricity Proclamation No. 86/1997
  - Investment Proclamation No. 280/2004
  - Rural Electrification Fund Establishment Proclamation No. 317/2003
  - Water Resources Management Proclamation No. 197/2000

# **Legal Frameworks - Continued**

- Mining Proclamation No. 52/1993
- Petroleum Operations Proclamation No. 295/1986
- Environmental Protection Organs
   Establishment Proclamation No. 295/2002
- Environmental Impact Assessment Proclamation No. 299/2002
- Environmental Pollution Control Proclamation No. 300/2002

# **Legal Frameworks - Continued**

#### Regulations:

- Electricity Operations Council of Ministers Regulations No. 49/1999
- Ethiopian Electric Power Corporation
   Establishment Regulation No. 18/1997
- Investment Incentives and Investment Areas Reserved for Domestic Investors Regulations No. 84/2003
- Mining Regulations No. 182/1994

#### **Regulatory Frameworks**

#### \* **Prior 1997:**

- Electricity was generated, transmitted, distributed and supplied solely by the state owned Ethiopian Electric Power and Light Authority (EELPA), established by General Notice No. 213/1956
- Generation, transmission, distribution and supply of electricity in Ethiopia was a vertically integrated state monopoly business run by EELPA

 Though pursuant to Article 5(13) of the 1960 Commercial Code of Ethiopia (Drafted by Prof. Jean Escarra and Prof. Alfred Jauffret) any person was allowed to engage in the business of producing, distributing and supplying of electricity for commercial purposes there was neither registered private utility doing these activities nor independent regulatory body to follow-up the business

#### \* After 1997:

 On July 1997 the House of Peoples' Representatives (Parliament) passed Electricity Proclamation No. 86/1997(Proclamation) that established the Ethiopian Electricity Agency (EEA), as a Federal Government organ to regulate the electricity industry of the Country

- Pursuant to Article 6 of the Proclamation the main powers and duties of the Agency are:
  - Supervise and ensure that the generation, transmission, distribution and sale of electricity are carried out in accordance with the electricity legal frameworks
  - Determine the quality and standard of electricity services and ensure the implementation thereof

- > Issue certificates of professional competence to electrical contractors
- Issue, suspend and revoke license for the generation, transmission, distribution and sale of electricity
- Study and recommend a tariff and upon approval supervise the implementation thereof

- EEA as both economic and technical regulator
- After the promulgation of the electricity and investment proclamations private investors, domestic or foreign, in the form of plc, partnership, cooperative societies, etc., are allowed to participate in the generation, transmission, distribution & sale, import or export of electricity except connected with grid

- Pursuant to Article 5(1a) of the Investment Proclamation No. 280/2002 transmission and supply of electricity through the integrated National grid system is exclusively reserved for the Government
- In addition pursuant to Article 5 of the Council of Ministers Regulation No.18/1997 (EEPCo) was corporatized and empower to engage in the business of producing, transmitting, distributing and selling of electrical energy

- In accordance with Article 18 of the Electricity Operations Regulations 49/1999 and Article 5 of Directive for Maximum Duration of License for Non-Hydro Power Generation Plants for Commercial Purposes No. 1/2005 and based on the life of the project the maximum duration of the license to be issued by the EEA are:
  - > hydropower generation license......40 years
  - For transmission license ...... 50 years
  - > For import or export license......50 years
  - For distribution and sales license... 10 years

For thermal power gen. license.....30 years
For geothermal power gen. lice....25 years
For biomass power gen. lice.....20 years
For wind power gen. license.....20 years
For solar power gen. license.....20 years
For diesel power gen. license.....15 years

#### Part II

Issues of Sovereign Guarantee and Risk Allocation for Electricity Development

#### **Conditions for Sovereign Guarantee**

- \* Power sector reform
- Independent Power Producers (IIPs)
- Single Buyer Model
- \* Power Purchase Agreement (PPA)
- Government commitment to take some risks

# Why Sovereign Guarantee is Necessary?

- Associated with different types of risks
- Capital intensive investment e.g. hydro, geothermal
- \* Long pay back period
- \* To improve the bankability of the project

# **Types of Guarantee**

- Constitutional guarantees
- Regulatory guarantees
  - An independent & effective regulator
- **\*** Political guarantees

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- Stable political environment
- \* Contractual guarantees
  - Power Purchase Agreement (PPA)
  - Implementation Agreement (IA) or Sovereign Guarantee

#### **Risks - General**

- \* Risk is caused by uncertainty
- Investor has to perceive risks and analyze before making investment decision in the power sector
- The general understanding about risk is that a party better able to manage it should handle it
  - Some types of risks could be easily handled by the investor/owner and others by the single buyer and the remaining by both the investor/owner and the single buyer jointly

### **Risks - Forms**

- Risks will vary across segments in the power sector
  - Generation
  - Transmission
  - Distribution segment
- Risks also vary based on the source of electrical energy
  - Hydro
  - Geothermal
  - Thermal

#### **Risks Forms - Continued**

- \* Risks also vary according to the different types of investment arrangements
  - Build Operate Transfer (BOT)
    - After construction and operation for a limited period of time by an IPP the plant will be transferred free of charge to the Government
  - Build Own Operate (BOO)
    - The plant is constructed and operated for the life span of the project and then decommissioned by the developer/owner
  - Build Own Operate -Transfer (BOOT)
  - Build Transfer Operate (BTO)

# **Risk Types**

#### \* Political risks

- Political instability such as revolution or wars
- Nationalization or expropriation
- Non-fulfillment of contracts signed with the state
- \* A reliable legal environment risks
- Resource availability risks
  - Steam field, geothermal resources
- \* Completion risks
- \* Force majeure risks
  - Change in law, act of God
- Regulatory risks
- Environmental risks

# **Risk Types - Continued**

- \* Foreign exchange risks
  - Exchange rate regime
  - Convertibility and repatriation of profits
- \* Market risks
  - Availability of market for the power generated
  - Credibility of the Government owned utility
- \* Construction risk (Hydro)
  - Geological conditions
  - Construction delays
- \* Hydrological risk (Hydro)
  - Drought

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- Flood damage during construction
- \* Fuel supply risks

#### Mitigating ways of Regulatory Risks

#### \* Regulatory risks may be mitigated by:

- having a clear basis for price reviews and performance measures
- an ongoing dialogue between the regulator and the regulated utilities
- a multi-year tariff model with a known time table for price & performance reviews

#### Part III

The Ethiopian Experience on Cases of Sovereign Guarantee and Risk Allocations

### **Ethiopian Experience**

- As mentioned in Part I of this presentation Ethiopia has:
  - Constitution that allow private investment
  - Policy frameworks that encourage private investment
  - Power sector reform legal frameworks
  - An independent electricity regulator

- Currently Ethiopia is following an Integrated Single Buyer Model
- EEPCo controls all the generation, transmission, distribution & sale segments connected with the grid centrally having total installed capacity of 766.9 MW predominantly from hydro
- EEPCo is to underway some form of restructuring by accounting unbundling

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 In Ethiopia, unlike other similar countries like Philippines, Turkey, etc, there is no specific BOT legislation and no set procedures for the award of BOT arrangements either

- Since there is no legal restriction on the type of arrangement to be used, based on the type of the project and the risk allocation agreed by the parties, BOT, BOO or BOOT may be used
- \* EEPCo signed Memorandum of Understanding (MoU) with different foreign private companies to generate electricity mainly from hydro

#### \* Major MoUs are:

- MIDROC: Gojeb HPP 153 MW January 2001
- ENERCO: Awash IV HPP 40MW
- ENERCO: Genale HPP 163MW
- ENERCO: Delbi Moye Coal 75MW
- WAMBO (China): Geba I & II HPP 371.5MW 2005
- Kenya & EEPCo (Joint Development and Operation): Genale Dawa HPP 600MW 2006
- Apoji: Halele Warabisa & Chemoga Yeda HPPs 435MW & 420MW respectively 2006

\* MIDROC submitted on the same year of the MOU:

- Draft PPA to EEPCO
- Draft IA to EEA
- Both drafts are similar to those submitted to the Ugandan Government for the development of Bujaghli HPP by AES Nile Power Ltd (AESNP) in BOOT basis

- The draft IA contained among others the following clauses:
  - Security to be Provided on behalf of FDRE
  - > Financing the Project
  - > Site and Facilities
  - Consent

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- > Construction Obligations
- > Restrictions on Acquisitions and Transfers of Shares and Assets

- > Representations and Warranties
- > Investment Permit Matters
- Insurance
- > Liability and Indemnification
- Force Majeure
- > Restoration
- > Events of Default; Termination

- \* Though different MoUs signed and extensive discussion made with IPP investors:
  - No signed PPA between an IPP and EEPCo
  - No signed sovereign guarantee (Implementation Agreement (IA))
  - No medium or large IPP become operational

#### Part IV

# Conclusions and Recommendations

# Conclusions

- Prior to 1997 there was no independent regulator of the electricity industry of Ethiopia
- After the 1997 power sector reform an independent regulatory agency (EEA) established and the operator EEPCo corporatised
- Our reform process is not as fast as other western countries and yet dominated by a vertical integrated state monopoly

# **Conclusions - Continued**

- Though many MoUs signed, no single IPP become operational, i.e., no medium or large sized IPP, no PPA, no sovereign guarantee
- In more risk profile country environments, governments usually are required to assume more risks
- As markets open and private power projects become more common, host country governments will probably assume fewer risks

# Recommendations

 Strong government commitment is a determining factor for the success of private investment in electricity generation

 Government participation in risk sharing is a key element, i.e., distribution of risks between the Government and the private investor is important

# **Recommendations - Continued**

- Sovereign guarantee should be given on selected bases on set criteria
- Sovernment may provide guarantee on the following areas:
  - Political force majeure events, e.g. Change in law, expropriation
  - Currency convertibility
  - Repatriation of necessary funds, e.g. debt payment, dividend for equity contributors

# THANK YOU