

ICA Annual Meeting, Tokyo 13-14 March 2008

# Power Supply Situation in Africa



Tokyo, March 2008

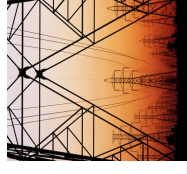
### **Outline**

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- **Background**
- **Power Supply Crisis**
  - ✓ **East Africa**
  - ✓ **Southern Africa**
  - ✓ **West Africa**
  - ✓ **Central Africa**
  - ✓ **North Africa**
- **Conclusion**

### Background

- power supply is a key factor for poverty reduction
  - ⇒ impact on MDGs;
- SSA access rate to electricity: average about 24%;
- North Africa access rate to electricity: 27-99%;
- In 2006: installed capacity in Africa was about 106.3 GW
  - ⇒ SSA accounted 66.8 GW (63%)
  - ⇒ excluding South Africa: rest of SSA 28GW (31% of total Africa);
- total population: 917.8 Million ⇒ SSA accounted 747.3 Million (81%);
- GEN Capacity needed by 2015 for SSA: **about 27,000 MW**.



# Power Supply Crisis

## 1. East Africa

- ⌘ Energy deficit => due to significant decrease of water level in rivers and lakes in the region;
  - => High growth, low investments, conflicts;
- ⌘ Most of the countries => use expensive energy from diesel power plants to supplement Hydro;

## ❖ REGIONAL ENDEAVOUR

- Creation of the Power Pool (EAPP) => pooling available resources together;
- Planned < 4,400 MW by 2015 in the region;
- Regional interconnections (Ethio-Kenya-Uganda-Rwanda-Burundi-Tanzania).

### Power Supply Crisis

#### 2. Southern Africa

- power supply crisis => deepening ;
- ⌘ Economic growth => < 5% in most of the SADC countries ;
- ⌘ No tangible investments in generation capacity in the last twenty years;
- ⌘ World Cup 2010 and Mining activities;
- ❖ REGIONAL ENDEAVOUR
  - Strengthening the capacity of the Power Pool (SAPP);
  - Planned < 13,300 MW by 2010 in the region;
  - Regional interconnections (WESTCOR).

### Power Supply Crisis

#### 3. West Africa

- annual electricity demand growth: < 7% ;
- estimated suppressed demand: 20-30%;
- ☞ High oil prices => pressure on countries depending more on diesel power plants;
- ☞ About 63% of Generation is thermal;

#### ❖ REGIONAL ENDEAVOUR

- Strengthening the capacity of the Power Pool (WAPP);
- Plan to meet the additional needs of about 7,000 MW by 2015;
- Regional interconnections (OMVG, OMVS).



### Power Supply Crisis

- 4. **Central Africa**
  - Electrification rate: 13.4%;
  - Total installed capacity: 4,800 MW (2,400MW in DRC);
  - capacity needed by 2015 for the region: about 1,400 MW;
  - ☞ Causes of the Crisis: High growth, low investments, conflicts;
- ❖ **REGIONAL ENDEAVOUR**
  - Strengthening the capacity of the Power Pool (CAPP);
  - Plan to develop Inga sites HPP: Rehab.Inga1&2 (+910MW by 2010), Inga3 (3,500MW by 2015) and Grand Inga (40,000MW by 2020);
  - Regional interconnections (mainly to Inga HPPs).

**NB:** AfDB intends to finance PFS & FS for the Development of INGA sites (HPPs & associated interconnectors);

# CONCLUSION

## ☞ **Main causes of the crisis**

- Lack of Planning;
- Poor maintenance;
- High economic growth;
- Conflicts;
- Droughts;
- Rising oil prices.

## ⌚ **Suggested actions to undertake**

- Commitment to invest in Generation, T&D (Political, financial, regional and international);



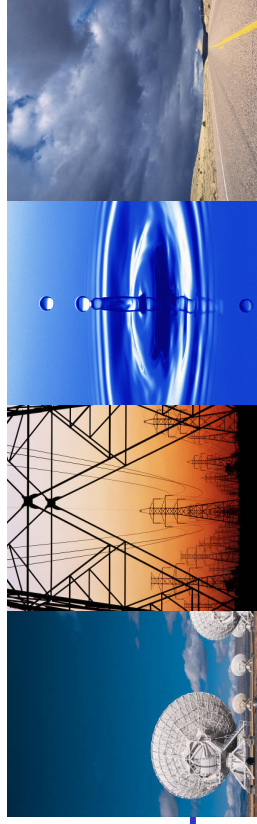
### CONCLUSION (Cont.)

#### **Suggested actions to undertake (Cont.)**

- Strengthen the Capacity of the Power Pools;
- Focus on large-scale generation projects and regional interconnections;
- Strengthen the capacity of Power Utilities (planning, operation & Maintenance);
- Support to sector reforms ( enabling environment to private investment).



The Infrastructure Consortium for Africa  
Le Consortium pour les Infrastructures en Afrique



# *Thank you for your* **ATTENTION**

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