Part 1: STRUCTURE OF THE FRENCH ELECTRICITY SUPPLY INDUSTRY
LEGAL CONTEXT

- December 1996: European Directive
  - Progressive introduction of competition within EU
  - First step: for huge customers (100 GWh) in 1999
  - Decreasing energy limit down to 0 in 2007

- February 2000: French act for the 'Modernisation and development of public services in electricity'
  - Decision to create an independent and non-discriminatory Transmission System Operator
  - July 2000: Birth of the French TSO; RTE is an unbundled company within EDF

- August 2004: French act regarding gas and electricity companies
  - RTE is a separate legal entity (subsidiary company of EDF)
**Structure of the french ESI**

- **Competitive generation:**
  - Beside EDF, other competitors (CNR, SNET, SHEM, …) have generation capacities in France and are supplying, eligible customers.
  - European suppliers have directly contracted with eligible customers.

- **Transmission monopoly:**
  - RTE is the french TSO, under the supervision of the french regulator [CRE].

- 22 major local distribution companies + 138 minor local franchises.
RTE’s objectives

RTE HAS TO:
- operate
- maintain
- develop

THE PUBLIC ELECTRICITY TRANSMISSION GRID

AND TO GIVE ACCESS TO ALL USERS IN A NON DISCRIMINATORY WAY
French Market

suppliers
~ 450 TWh / y

OTC contracts
customers
ST, MT or LT

members
12 to 15 TWh / y
D - 1 (4 p.m.)

RTE is a large customer
purchasing losses (13 TWh/Year)

members
RTE is a founding member and is president of the board

Powernext
Day ahead spot market

balancing participants
2 to 7 TWh / y

RTE is the direct operator

“real time” mechanism

time scale
Part 2: CURRENT ELECTRICITY SUPPLY / DEMAND SITUATION
RTE : a major actor in electrical demand forecasts

- Historical roots:
  - RTE is used to this exercise and has improved methods.

- Central position:
  - Operating the transmission network, RTE has the records of all consumptions.

- Duty of independance, confidentiality, and public service.
RTE is in charge (by law) of a multi-annual generation adequacy report once every two years; the report involves:

- a forecast of the total electricity demand (French consumption added to exchanges with other countries)
- a comparison of these forecasts with known developments in generation facilities
- an evaluation of the required new generation facilities

The Ministry of Energy decides the multi-annual generation investment program after the study of this report to guarantee the predefined level of security of supply.
Development Scheme of the grid

● RTE is in charge of the grid development scheme report once every two years; the three steps taken are:

• the RTE evaluation of the grid weaknesses taking into account, in each region, the electricity demand, and the generation means

• a consultation (organized by public authorities) with the local actors around RTE studies: hypothesis (production, demand forecast) and results

• a final shared vision of the long term needs in grid evolutions

● The Regulator [CRE] gives an opinion, and finally the Ministry of Energy approves the report,
THANK YOU FOR YOUR KIND ATTENTION!