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EUROSYSTEMET

Russian Electricity Sector Reform – Or how to liberalize a 1000 TWh market?

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Russia's Power Sector in a Nutshell

- Electricity generation about 1000 TWh, world's 4. largest electricity consumer
- The world's largest unified grid (from StPetersburg to Far East)
- The main fuel is natural gas, about 40% of all electricity generated, along with 20% hydro, 11% nuclear
- T&D losses very high, low fuel efficiency, existing capacities in full use
- Pre-reform; regulated prices, no competition

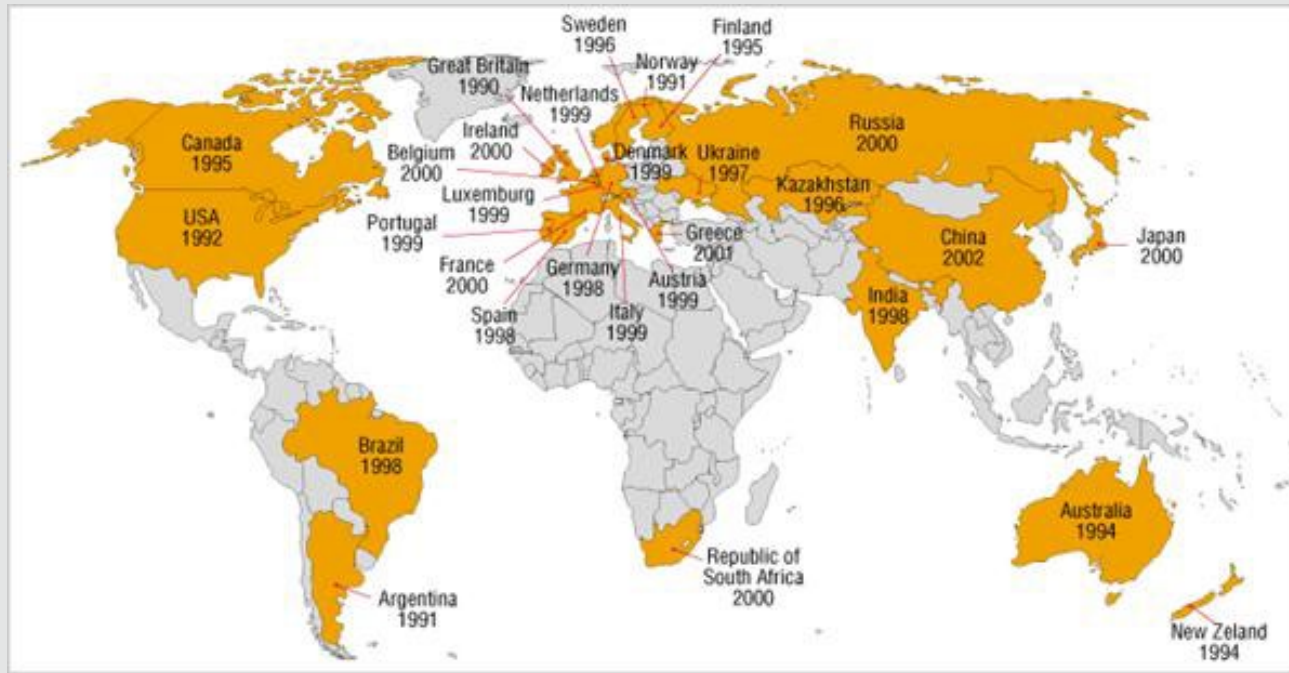
Reform background in Russia

- Aging capacities in full use and consumption growing
- Occasional power shortages, eg Moscow, Jan 2006
- The reform was discussed throughout the 1990's,
- key legislation passed in 2001, 2003 and 2006
- Based on separating competitive and monopolistic functions and privatizations of the competitive ones.
- Goal: new investments



www.chubais.ru/humor

Internationally, Russia was a latecomer in the power reform movement...



Source: www.rao-ees.ru

...and therefore it could benefit from lessons learned elsewhere.

Russia followed closely the "World Bank textbook model":

1. Corporatize power sector enterprises
2. Unbundle
3. Autonomous, transparent regulator
4. Privatization of generators and distributors
5. Develop power markets
6. Streamline the role of the government

Source: Besant-Jones, John E. (2006). Reforming Power Markets in Developing Countries: What have we learned? World Bank, Washington.

Post-reform power market in Russia structure

Monopolistic sectors (majority owned by the state)		Competitive sectors (mostly privately owned)
System Operator	Federal Grid Company	Generation companies (OGKs, TGKs, RosHydro, RosAtom, independents)
MRSK-Holding (11 interregional distribution companies)		Sales companies

The outcome, so far

- A great and complicated reform designed according to the international "best practices"
- Dual power market (electricity and capacity)
- A huge change in the whole industry

- The main target achieved: New generation capacities will be commissioned and electricity shortages avoided

- New investments are not market-driven
- State continues to own a large share in power generation, T & D

Three key remaining challenges:

1. Will competition eventually emerge?
 - transmission bottlenecks
 - the role of state-owned and controlled companies
 - M&As
2. The quality of regulation
 - in T&D as well as in wholesale markets
 - the power market structure is extremely sophisticated but complicated
3. The Russian speciality: heat sector



Lessons from the Russian power reform?

- Liberal reforms are possible – even in Putin’s Russia
- Need to attract genuinely private investments is a powerful driver for reform design
- Transparent privatization deals needed to maintain legitimacy of property rights
- Let foreigners enter the sector
- **Rules first, reforms second** (but ex-ante political constraints, Roland 1994; logic of institutional reform, Shleifer 1995, sequencing regulation and privatization matters, Zhang et al 2005)
- Capacity market as a commitment device?

Thank you!

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