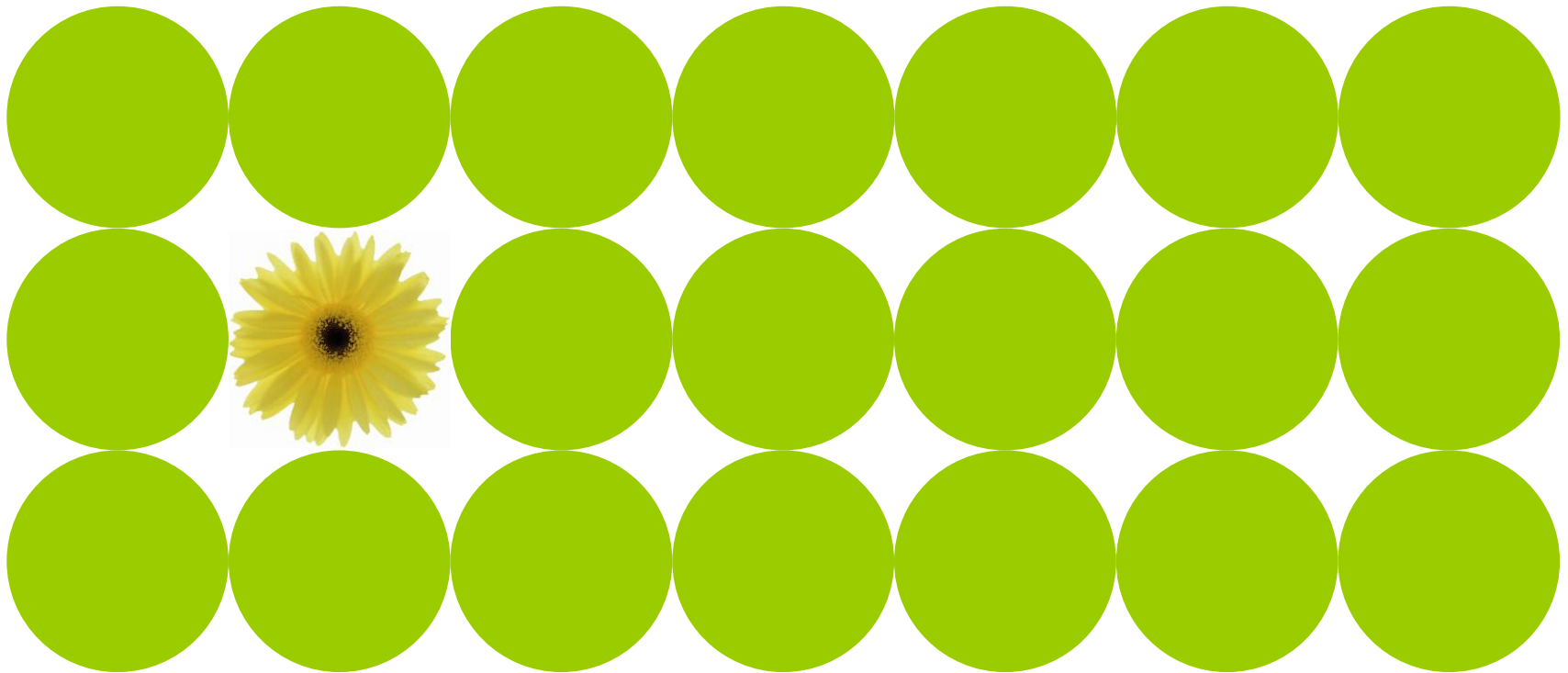


Long-term contracting and risk management from the point of view of a large consumer



Presented by Petter Longva at the workshop on
Efficiency, Competition and Long Term Contracts in Electricity Markets
in Florence 15 - 16 January 2009

Large consumers have to participate actively in mature energy markets

- Favourable tariffs and legacy contracts are gone
 - We promote liquidity, competition, and free entry
 - Worst case: Dominant players and monopolistic pricing
- Market liquidity starts with unrestricted bilateral contracting
 - Spot markets are used to balance the portfolios of the players
 - Spot market prices develops into references for financial contracts
 - Forward curves gradually stretch further into the future
 - Complex (structured) contracts are developed in order to share risk
- No market without contractual freedom
 - Bilateral contracting is necessary for starting a market
 - Structured contracts is key for risk sharing
 - Long-term contracts redistribute market power

Electro-intensive industry needs long-term supply contracts

- Competitors are exposed to different energy markets
 - Regional electricity markets
 - Common, globalised product market
 - Margins are strongly exposed to a volatile, global fuel market
 - Capacity development needs 10 - 20 year predictable electricity prices
- Supply alternatives in a mature energy market
 - Develop own generation capacity (and secure contract for fuel)
 - Develop import capacity
 - A long-term contract
 - Supplier with a different risk profile (new, large scale hydropower or nuclear)
 - Creative contracting (cross-indexing etc.)

Traditional long term energy supply contracts

- Take and Pay (for taken volume)
 - A **minimum** and **maximum** volume for a period and a **maximum** take per hour
 - Flexibility in **timing and total volume** of the take
 - Fixed or indexed price
 - Mutual exclusivity for a given area
- Take or Pay (virtual hydropower)
 - A **fixed** total volume for a period (year) and **maximum** take per hour
 - Flexibility in the **timing** of the take
 - Fixed or indexed price per unit
- Virtual Power Plant (virtual thermal power)
 - Annual up-front payment
 - **Maximum** take per hour
 - Fixed (or indexed) price per unit taken

Competition authorities are sceptical to long-term contracts

Reason 1: Exclusivity and destination clauses are seen to deny market access for new entrants (foreclosure)

Reason 2: Such contracts are seen to prevent the development of transparent pricing mechanisms

- These reasons are valid if
 - there is direct or indirect exclusivity
 - contract flexibility prevents the development of a spot market
 - market participation by the buyer is restricted
- Regulatory focus (as it should be)
 - forbidding certain clauses
 - breaking foreclosing relationships
 - promoting spot markets

Long-term supply contracts do not always protect margins

- Fixed price contracts may increase the risk in the energy value chain
 - General preference for pass-through of fuel prices
 - Lower risk if prices on both sides of the portfolios follow the market
 - Fixed prices come at a cost:
Risk exposure for the supplier is increased
- Long-term fixed price contracts come at a cost for the buyer
 - Possible exceptions: New hydropower and nuclear plants
- Small end users of energy do not need fixed prices
 - A small part of their costs
 - Floating price is cheaper
 - Competition removes (very) long contracts, anyway

Security of Supply only occasionally depends on long-term contracts

- Requirement for upstream supply
 - Financing of infrastructure development
 - Preservation of upside for upstream energy seller
 - Equity providers with an appetite for risk
- Long-term contracts are only occasionally important
 - Large upstream transport infrastructure development
 - Large capital cost component
 - Financially marginal
 - Project financing
 - Lenders ask for a secure margin
 - Equity providers are sceptical



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