



Commission for Energy Regulation

An Coimisiún um Rialáil Fuinnimh

# *Regulation of the Electricity Market*

Cathy Mannion

Director, Retail, Consumers & Environment

Commission for Energy Regulation



# Outline of Presentation

- Commission for Energy Regulation
- Overview of Electricity Market
- Electricity Retail Prices
- Tariffs Related Issues
- Conclusion





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# Legislation

- 1996: European Community Electricity Directive (96/92/EC)
  - Single European Market for Electricity
  - Introduction of Competition in Generation and Supply
  - Third Party Access to Electricity Networks
- 1999: Electricity Regulation Act
  - Commission for Electricity Regulation Established
- 2002: Commission for Energy Regulation
  - Following Gas (Interim) Regulation Act
- 2005: S.I. No. 60 of 2005
  - Amendment of 1999 Act

# CER

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## Commissioners





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# Commission: Organisation Chart

Regina Finn  
Commissioner

Tom Reeves  
Chairman

Michael G. Tutty  
Commissioner

Paul McGowan  
Director All Island  
Markets

Cathy Mannion  
Director Retail &  
Consumer Affairs &  
Environment

Eugene Coughlan  
Dep. Commissioner/  
Director Operations,  
Generation & Safety

Denis Cagney  
Director Energy  
Networks

Market Design  
Programme &  
Dominance  
Project Management

Electricity Supply &  
Consumer Affairs  
Gas Supply &  
Consumer Affairs  
Renewables  
Research &  
Development

Operations  
Human Resources  
Finance  
I.T  
Admin

Generation & Environment  
Power Generation  
Current Wholesale Market  
Licencing  
Electricity Safety Gas  
Safety

Electricity  
Transmission  
Networks Operations  
Networks Commercial



# Functions and Duties of CER

- Electricity Regulation Act 1999
- **(9)(1) Functions of CER...**
  - Establish system of trading
  - Advise Minister on impacts of generation on sustainability and international environmental agreements on environment & on the development of the electricity industry.
- **(9)(3) Duty to carry out functions in a manner...**
  - Not to discriminate unfairly between participants
  - Protects interests of final customers



# Functions and Duties of CER Contd./

- Electricity Regulation Act 1999
- **(9)(4) In carrying out duties have regard to need to...**
  - Promote competition, meet demands of customers, secure that licence holders are capable of financing activities, promote safety and efficiency, promote the continuity, security and quality of supplies, promote use of renewables, sustainable or alternative forms of energy
- **(9)(5) Without prejudice to the above...**
  - Take account of protection of the environment
  - Encourage efficient use and production of electricity and R/D
  - Take account of rural customers, the disadvantaged and the elderly
  - Require TSO to give priority to renewables in selecting generating stations



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# Overview of Electricity Market



# Market Opening

- **2000:** Eligible Market (Electricity) Opened 28%
  - 400 customers
  - Annual consumption > 4GWh
- **2000:** Green Market Opened 100%
- **2001:** CHP Market Opened 100%
- **2002:** Further Eligible Market Opening 40%
  - 1,200 additional customers
  - Annual consumption > 1GWh
  - Order S.I. 30/2002 to further open market
- **2004:** Further Eligible Market Opening 56% > 0.1GWh
- **2005:** Full Market Opening
  - All remaining electricity customers in Ireland (incl. domestic)



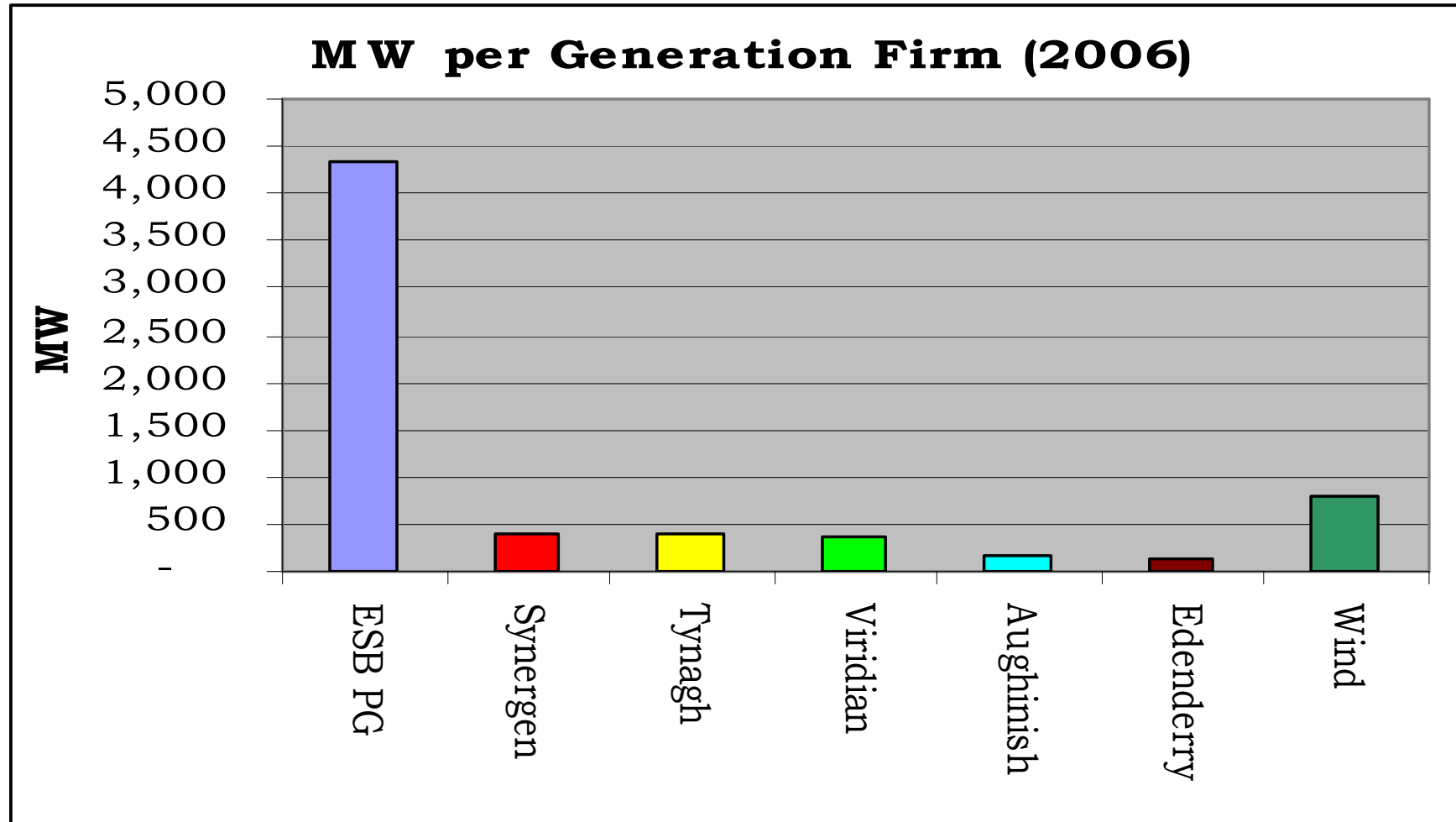
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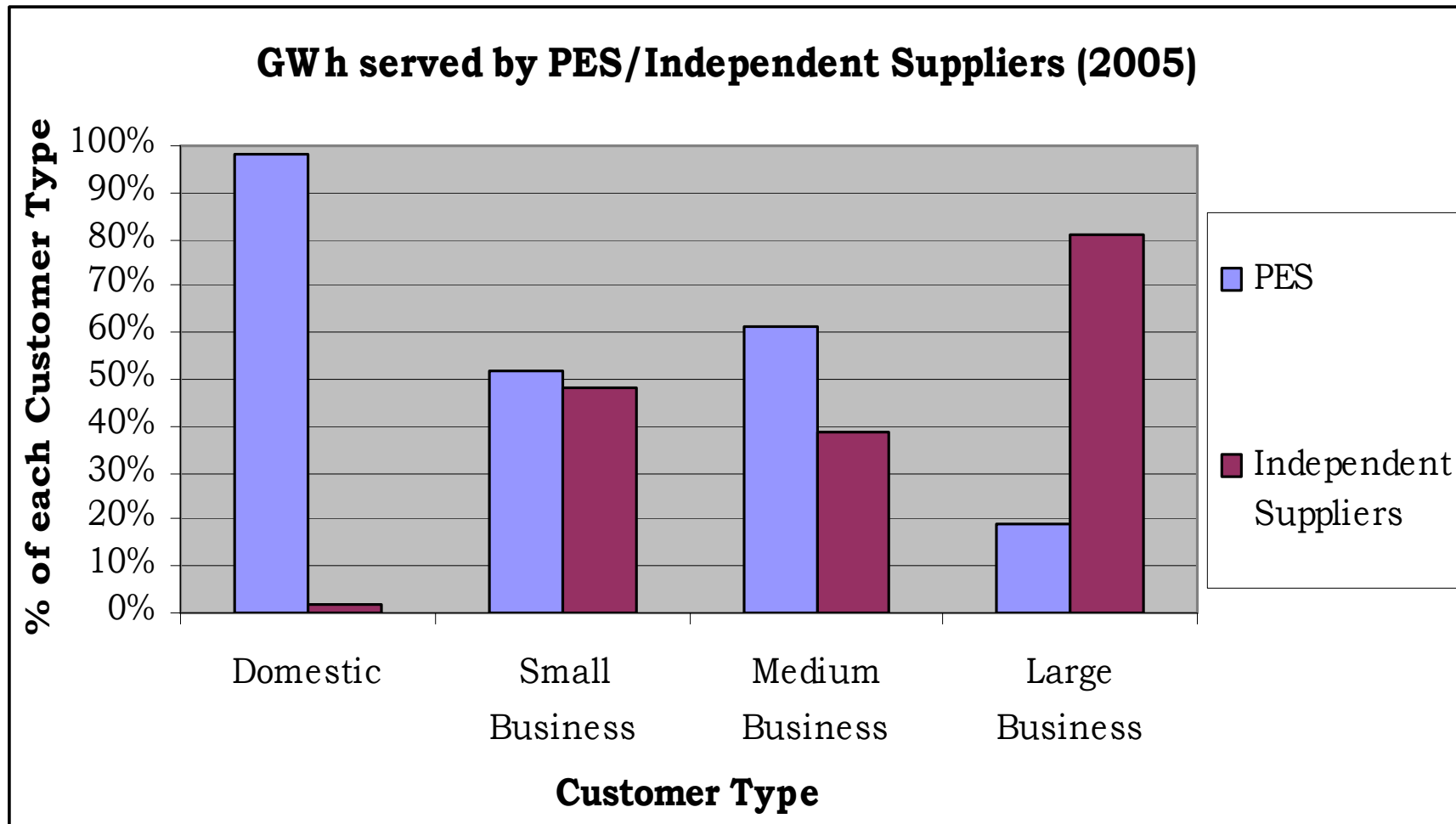
## Market Size

- Number of Customers 1.9 Million
  - Industrial/Commercial 180,000
  - Domestic Balance
- Annual Consumption 24,500 GWh approx.
- Peak Demand 4828MW (Tuesday, 13.12.05)
- Installed Capacity 6080MW approx.
- Demand Growth Est. 3.9% p.a.2004-2010
- Nth /Sth Interconnector 330 MW (existing)
- Moyle Interconnector 500 MW
- RoI/E&W Interconnector ??

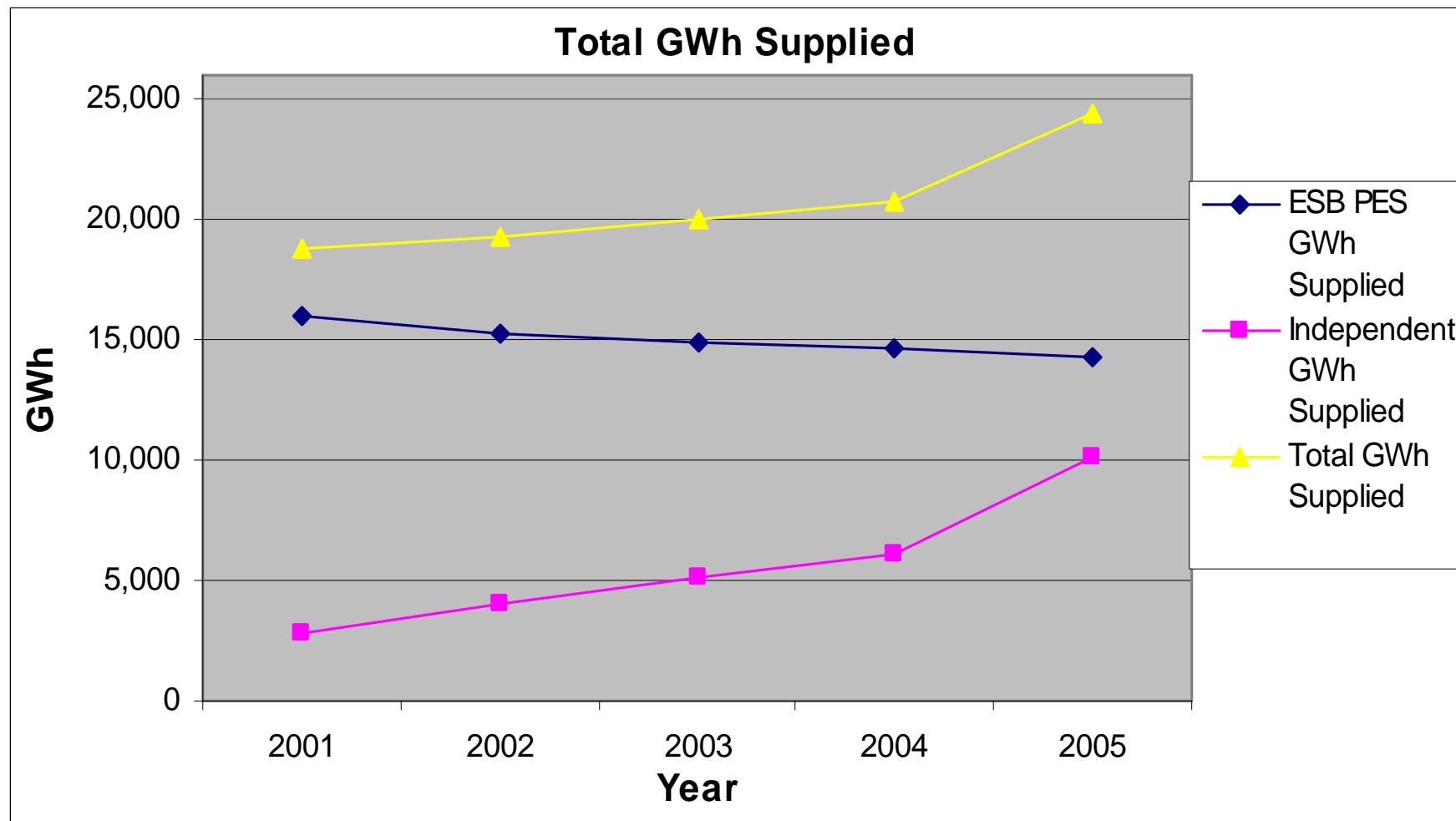
## Generation Market 2006



# Customer Load by Supplier



## Retail Market Growth



# Current Market Structure

- Bilateral contract market
- Generators contract with suppliers who sell to customers
- Sales arrangement between ESB PG and ESB PES
- CER approves PES tariffs – benchmark price
- ESB PG sells electricity to others at top up prices
- ESB PG buys electricity from others at spill prices
  
- CER consulted on how well the market was working
- Decided that changes were required
- Led to the establishment of the all-island Single Electricity Market planned to be operational in July 2007

# Future Market Structure

- A single wholesale electricity market will apply in RoI and NI markets (to maximise efficiencies)
- RoI and NI will face the same wholesale price at a particular point in time
- Allows suppliers and generators buy and sell in a transparent manner
- Wholesale prices will respond hour by hour to changing market conditions
- Suppliers can offer innovative tariffs to customers



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# Electricity Retail Prices





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# Tariff Setting

- Regulation of each component of cost – reviews:
  - 5 year for distribution and transmission (2006-2010)
  - 5 year for PES
  - 2 year for ESB PG
- Transmission tariffs
- Distribution tariffs
- PES charges
- PG sales arrangements
- PSO costs
- All feed into tariff analysis
  
- CER reviews PES tariff proposals (currently set for one year)
- Carries out market analysis as part of review
- Draft decision – early September
- Final decision – early October
- Implementation – following January



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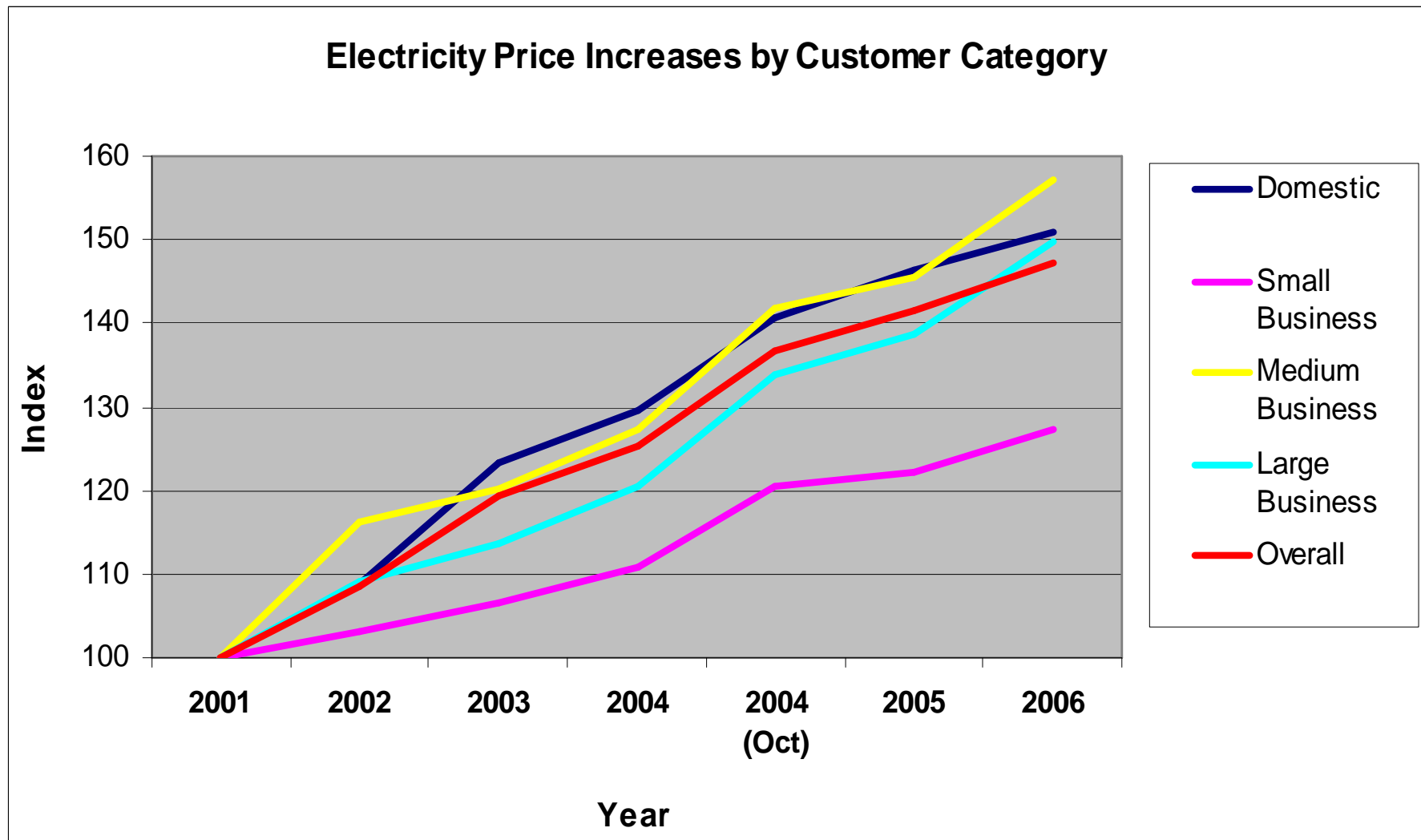
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# Public Service Obligations

- Impositions by the Minister on ESB / Licensees
- PSO can cover:
  - Security of supply
  - Environment (Renewables, CHP)
  - Use of indigenous resources (Peat)
- ESB allowed costs in excess of Best New Entrant price (BNE) - Calculated by CER
- PSO Levy collected from all end customers as a separate line item on all bills.

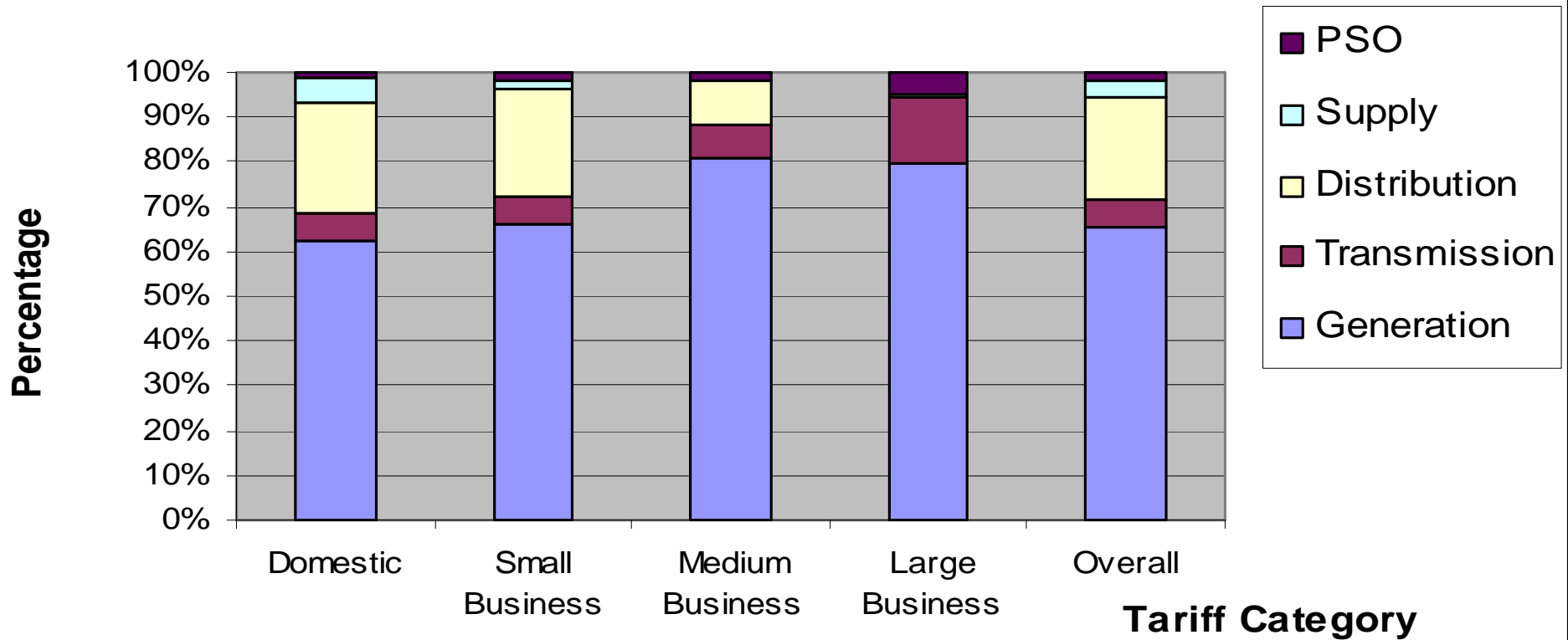
# Retail Electricity Price

## Trend

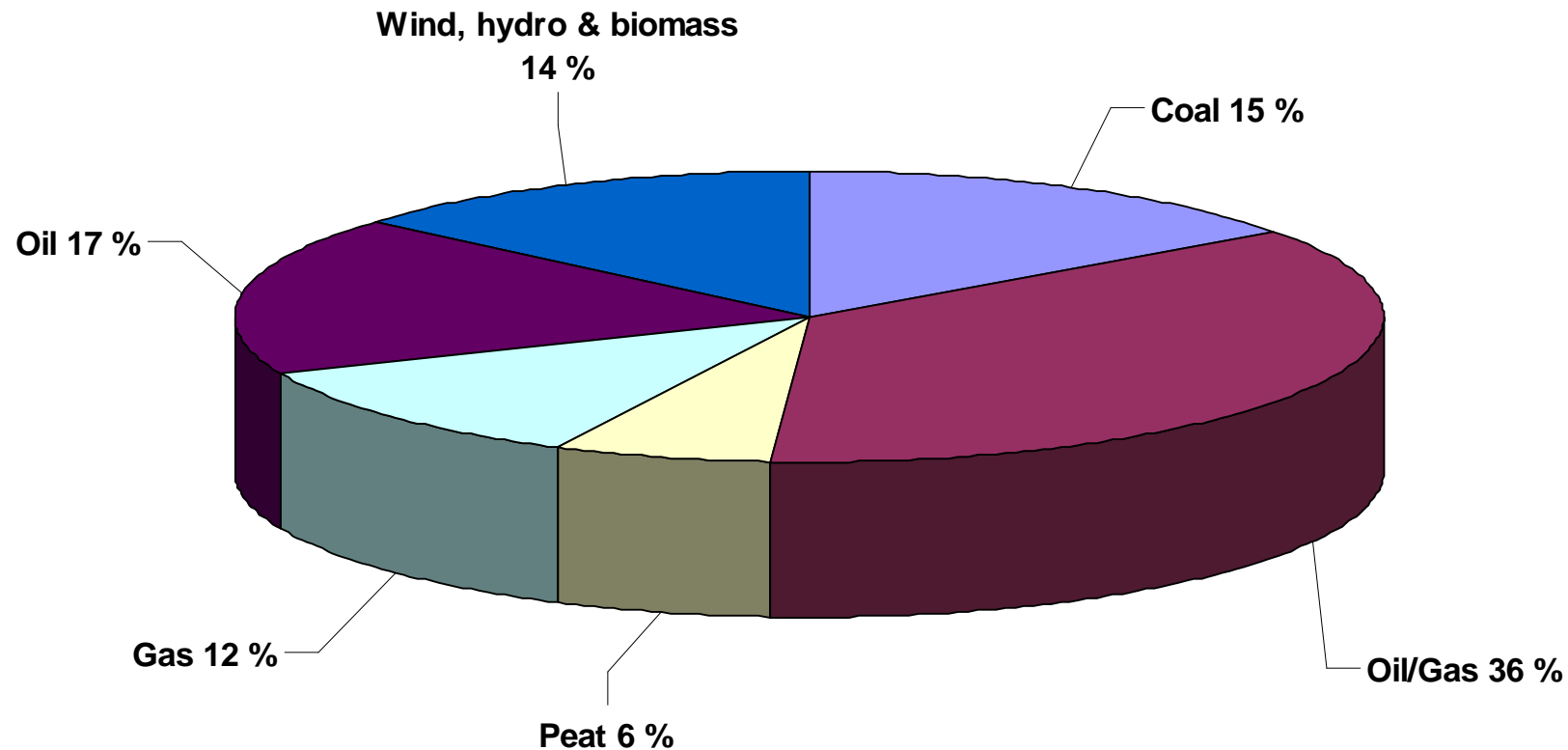


# Components of Final Electricity Price

**Contribution of each input to total cost**

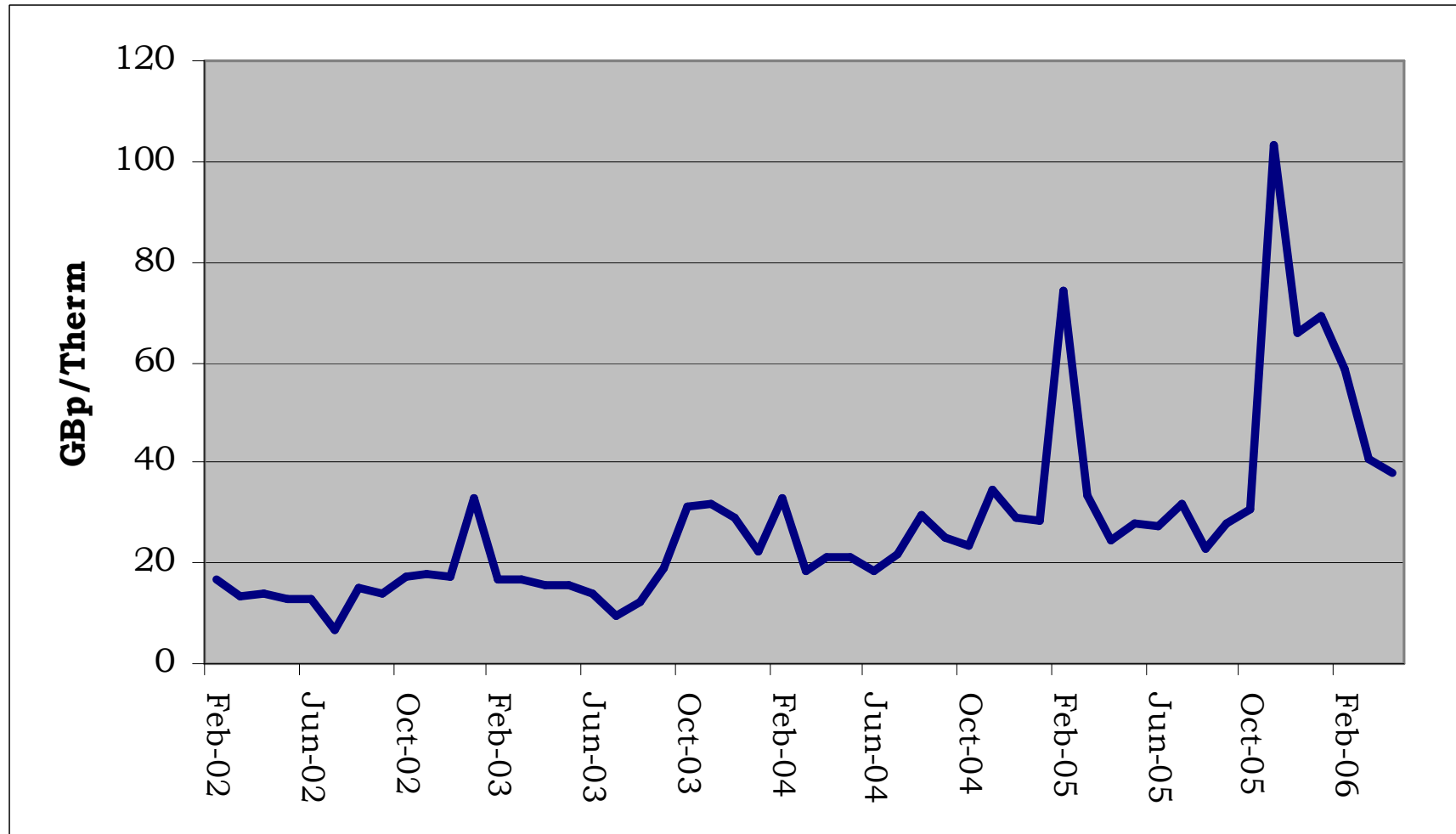


## Ireland's Generation Mix for 2005



Source: Transmission System Operator Ireland (2004), Generation Adequacy Report 2005-2011.  
Transmission System Operator Ireland (November 2005)  
Distribution System Operator Ireland (November 2005)

## UK Gas Prices (p/therm) NBP within day 2002 -2006





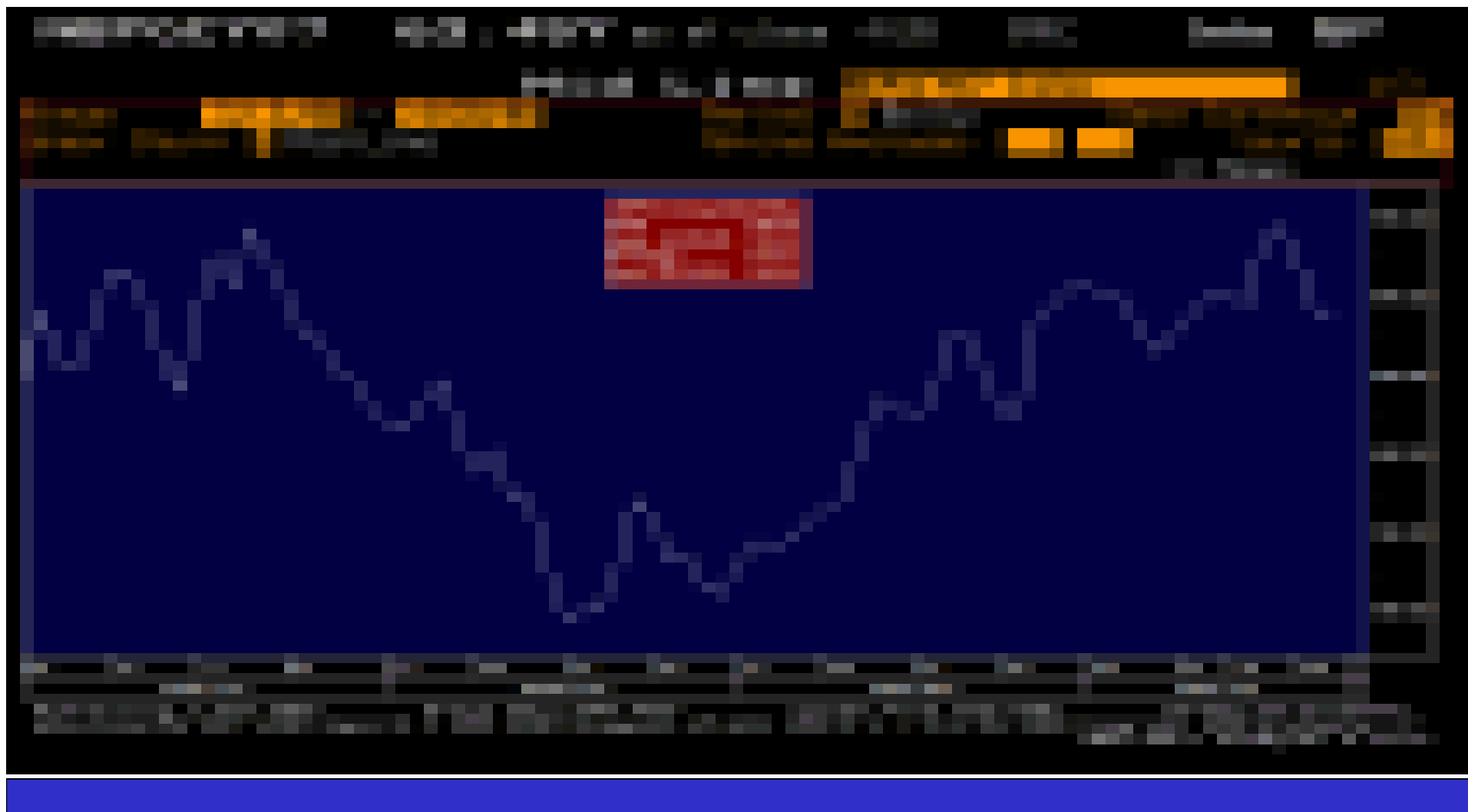
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# UK Gas Futures Price

## Trend

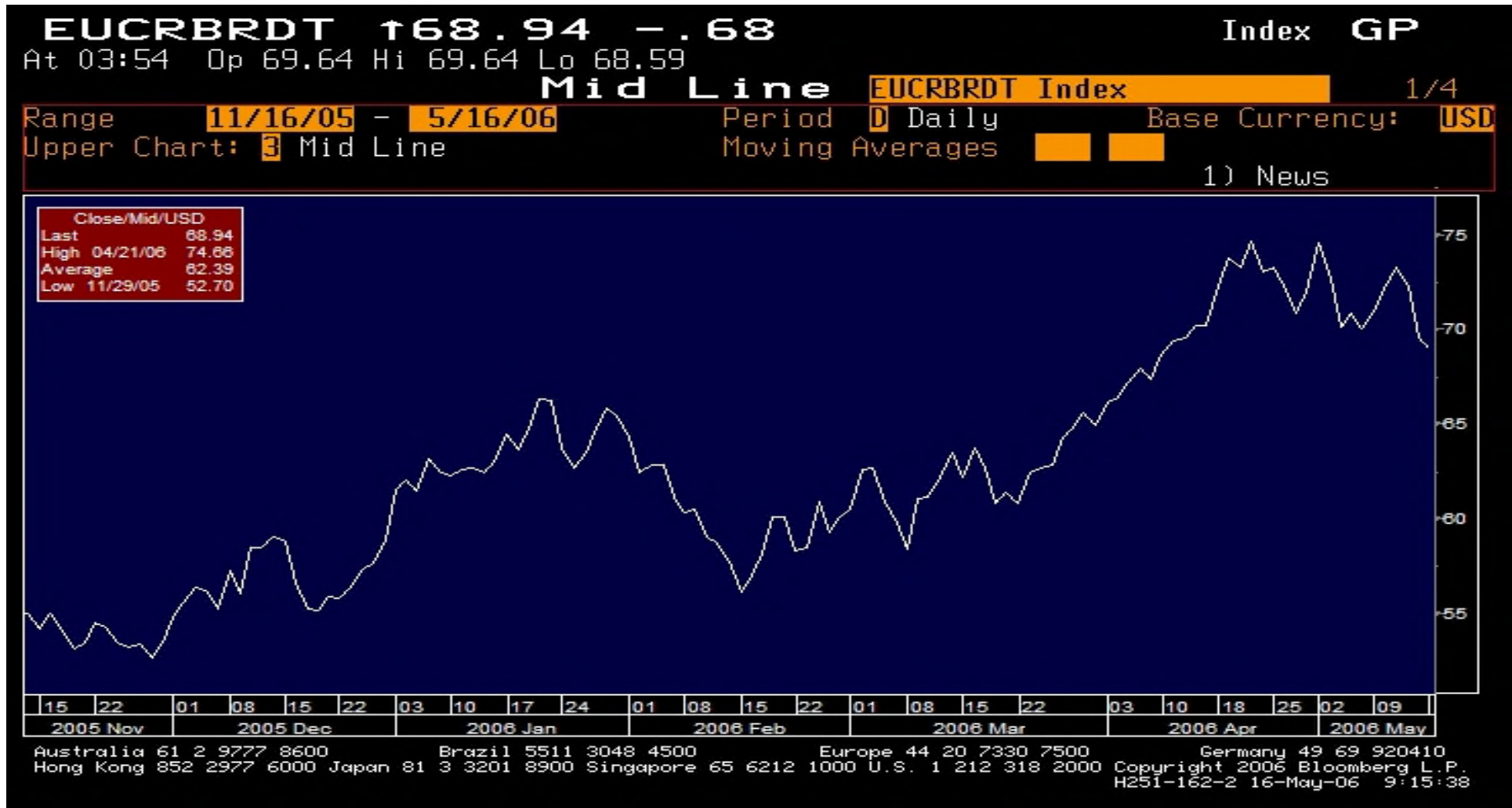
- Year ahead: April 06





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# Bloomberg: Oil Spot Price Trend 05/06





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# Tariff Related Issues



## 2007 Tariff Periods

- Normally, PES tariffs reviewed once a year (bar 2004)
- Two tariff periods will operate in 2007  
1 Jan–30 Jun and 1 Jul–31 Dec
- Necessary as moving from one market to another.
- To ensure no cross subsidy between tariffs.

# Fuel Variation Clause

- Do customers change consumption patterns if electricity prices changed hour by hour?
- CER considering a fuel price variation clause.



## Challenges

- Metering Technology
- Initial Capital Costs
- Will the savings be significant enough to effect real change?
- Supplier Innovation Required
- Customer Awareness

# Energy Efficiency

- High oil and gas prices = Upward pressure on electricity prices
- Generation component of final end user price average 60%
- At a time of rising energy costs, what can customers do to reduce their bill?
- Implementation of an energy management plan in business/ home? Proper insulation? Control over thermostat and timer settings? Use of 'A' rated appliances? Switching off electronic equipment fully?

# Demand Side Management (DSM)

- Customers can their usage pattern when electricity is expensive.
- Demand Peaks 17.00 – 19.00 Winter Weekdays.
- An example of DSM involves transferring consumption during these hours to other times of day.
- WPDRS (Winter Peak Demand Reduction Scheme)
- WDRI (Winter Demand Reduction Incentive)
- Can customers be incentivised to reduce consumption?
- What mechanism to adopt in the SEM?

# Conclusions

- Regulation has adapted to changing market realities.
- Competition in supply markets are in their infancy but signs are encouraging.
- SEM = real competition in generation markets.
- Price rises are reality....., but customers can save money through managing usage.
- Renewables – on target to meet obligations.  
Will continue to grow in importance