



NIA's Perspective on New Reactor Build

HSE Seminar on SAPs for Nuclear Facilities
Liverpool, 27 January 2007

Keith Parker, Chief Executive
Nuclear Industry Association



“We have concluded that new nuclear power stations would make a significant contribution to meeting our energy policy goals”

July 2006
Energy Review



Why new nuclear?

“By 2025, if current policy is unchanged, there will be a dramatic gap on our targets to reduce CO₂ emissions;

...we will become heavily dependent on gas; and at the same time move from being 80/90% self-reliant in gas to 80/90% dependent on foreign imports,

These facts put the replacement of nuclear power stations, a big push on renewables and a step-change on energy efficiency, engaging both business and consumers, back on the agenda with a vengeance.”

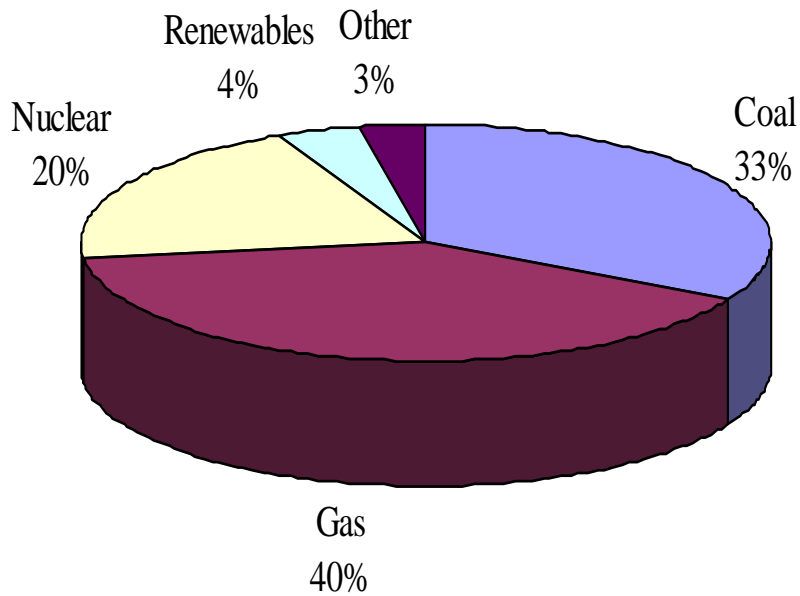


**Prime Minister,
Tony Blair 16 May 2006
CBI Annual Dinner**

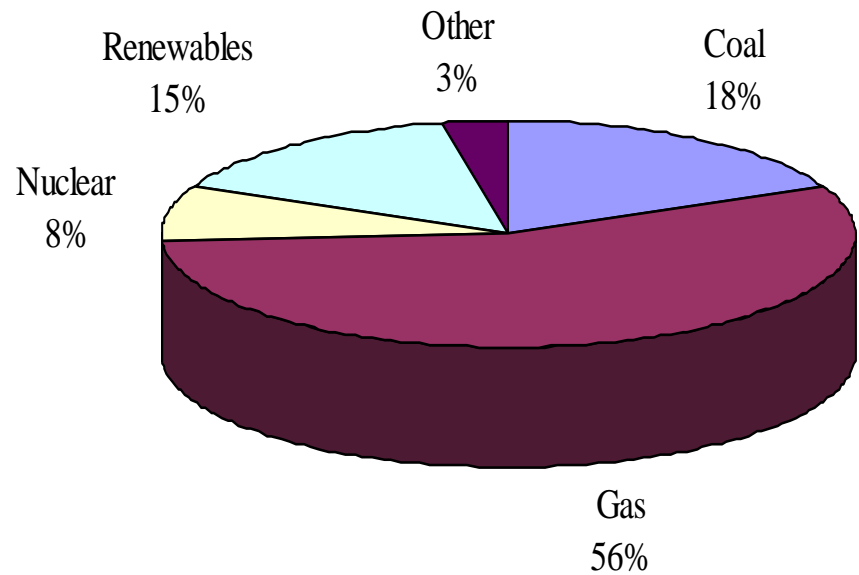


Today and 'Possibly' Tomorrow

2005

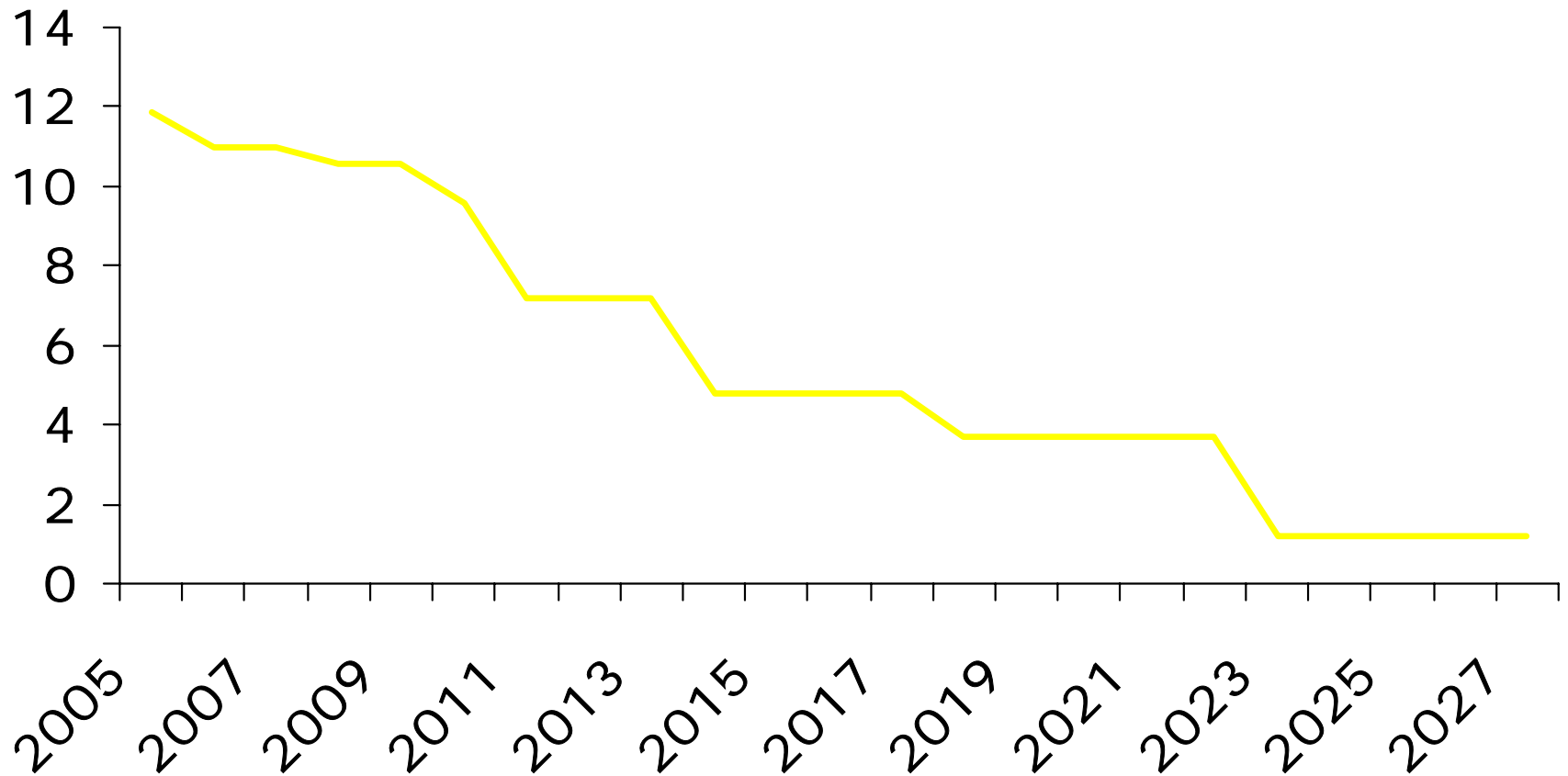


2020





UK Future Nuclear Capacity (GW)



The City View

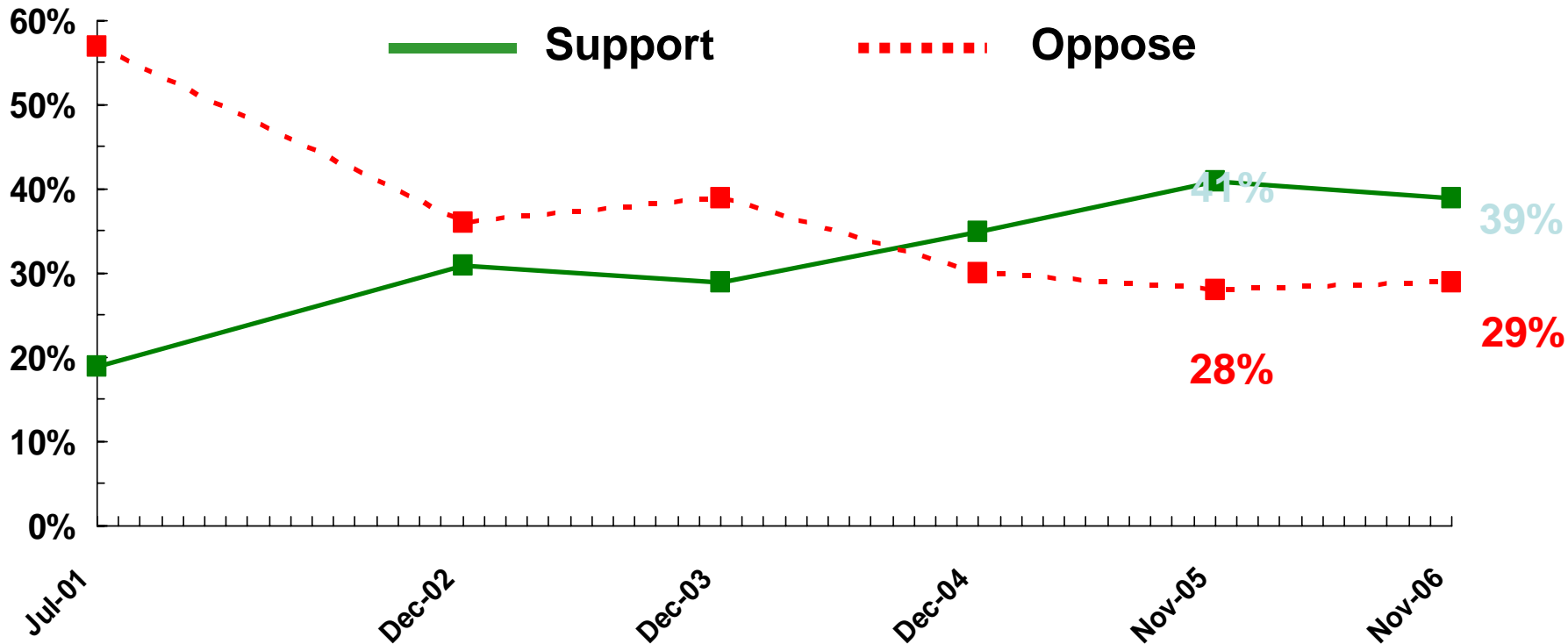
FT FINANCIAL TIMES

Any new generation of reactors would be the first to be built by the private sector, and companies and banks will first want to see Mr Blair's decision win public acceptance before sinking their money into what has been something of an investment black hole in the past.

Financial Times (18 May 2006)

Public opinion in favour

Q *To what extent would you support or oppose the building of new nuclear power stations in Britain TO REPLACE those that are being phased out over the next few years? This would ensure the same proportion of nuclear energy is retained.*





What The Industry Needs

Clarity on:

- Planning
- Licensing
- Long-term value for carbon
- Waste management arrangements



Who might invest?

“I will not make investments in nuclear unless I can see a carbon framework that gives me confidence there will be a price for carbon going forward, but I am not looking for guarantees.”

“...we will look to build plants with a range of technologies, including nuclear if the right environment and framework exist.”

“We will be moving with other technologies of which nuclear is just one, but it will start to make a contribution from the middle of the decade onwards.”



Dr Paul Golby
Chief Executive
E.ON, UK
Evidence to Trade and
Industry Committee
6 June 2006



Another view

“Added to the power crunch is the CO₂ emissions crunch, and that is why it is very important that we now take the decisions to enable the industry to make the investment in nuclear new build given the time horizon when that emissions crunch may happen.”

“If we are welcomed by customers and politicians in this country and by our shareholders we will make the choice to invest in new build in this country.”



Vincent de Rivaz
Chief Executive
EdF Energy
Evidence to Trade and
Industry Committee
6 June 2006



Next steps

Tony Blair, 16th November 2006

“We need a new generation of nuclear technology to provide our energy security.”

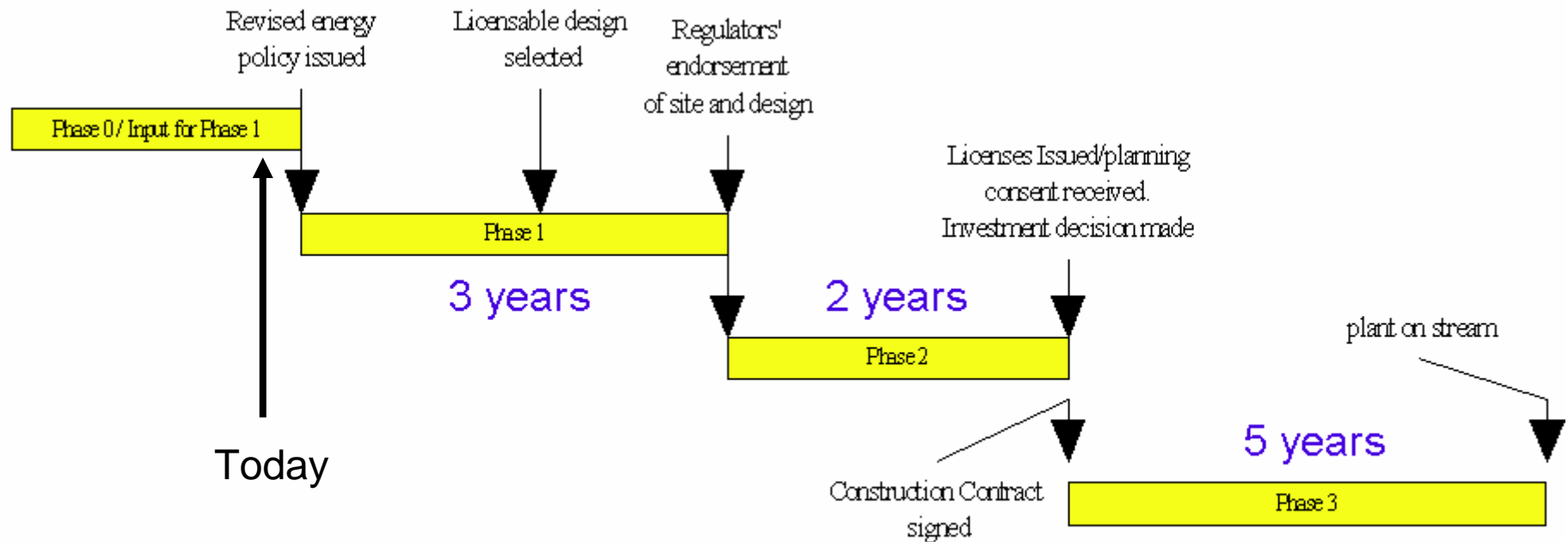
Energy White Paper due March 2007 to set policy framework

Right framework will enable investment



The timings are critical

5 years for approval : 5 years to construct





Consequences of delay

- Risk to energy security
- Generating gap
- UK at back of queue for nuclear projects and components
- Loss of UK capability



Can the industry deliver?

The NIA study in March 2006 of the UK supply chain capability:

Assumed

- 5 twin reactors over 20 years (maintains nuclear at 20%)
- international, approved designs

Concluded

- Much of engineering and construction work is broadly similar to other major projects
- UK nuclear supply chain could supply 70% of a new nuclear plant. With investment this could rise to 80%
- There are a few pinch points



Pinch Points for New Nuclear Build

- Policy Framework for investment
- Reactor safety and licensing resources (age profile)
- Programme and project management
- Some specialised plant items due to world upsurge in new nuclear build:
 - Large forgings
 - Reactor pressure vessel manufacture
 - Steam generator manufacture
 - Large turbine/generator manufacture



Actions to Overcome Pinch Points

UK Government must

- Set framework to attract Investors, Utilities and Nuclear System Vendors to the UK market
- Enable UK Regulators to implement streamlined licensing processes for international designs

UK Industry must

- Be competitive in the global supply chain
- Invest in Project Management
- Decide role and invest accordingly
- Prepare to supply resources and equipment



Conclusions

If the UK Government reduces the risk profile for new nuclear build by:

- Delivering political support
- Streamlining planning
- Enabling timely and predictable regulatory approvals
- Encouraging investment in low carbon technology by pricing carbon
- Clarifying policy on long-term storage and disposal of nuclear waste

THEN

- Nuclear will continue to contribute to the diverse, low carbon, affordable energy mix we need

AND

- New private investors will be found