

National Grid Presentation

5 July Ofgem Workshop

Agenda

- ◆ Opex
- ◆ Capex
 - ◆ Load-related and adjustment and incentive mechanisms
 - ◆ Non-load
- ◆ Financial Issues
- ◆ Overall impact on consumers

Opex

Electricity and Gas Opex

Ofgem's Initial Proposals

◆ NGET

◆ 2004/05

- ◆ 16% “Normalisation” reduction

◆ From this revised 2004/05 base Ofgem then factor in

- ◆ A further 9% reduction from 2007/08
- ◆ Increasing to 17% by 2011/12

◆ NGGT

◆ 2004/05

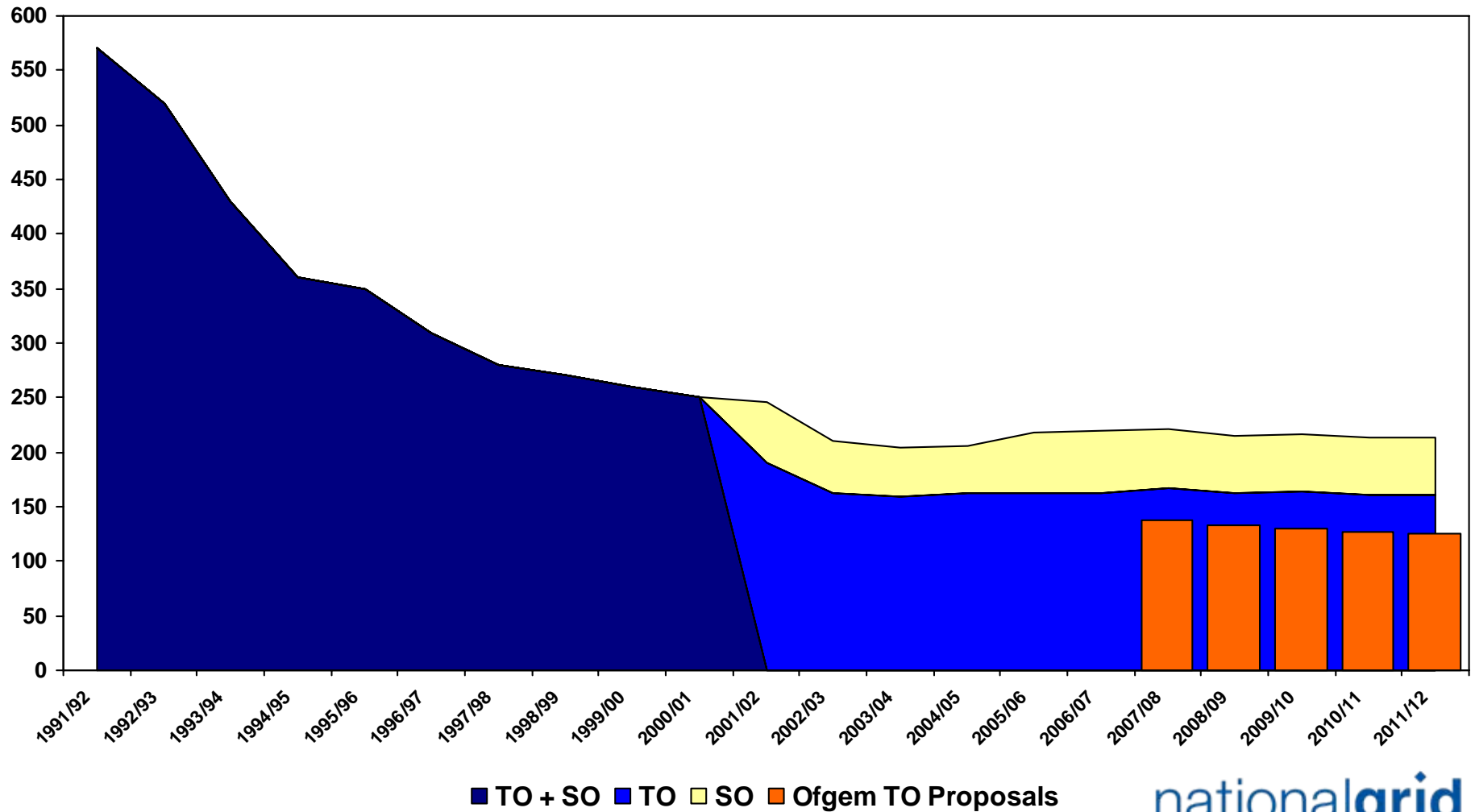
- ◆ 6% “Normalisation” reduction

◆ From this revised 2004/05 base Ofgem then factor in

- ◆ A further 8% reduction from 2007/08
- ◆ Increasing to 16% by 2011/12

Electricity TO Opex

The Gap Between Us



Why The Gap?

- ◆ “Normalisation” of 2004/05 is flawed
 - ◆ Normal costs deducted as if they were “abnormal”
- ◆ Projecting forward from 2004/05
 - ◆ Only partial recognition of “quasi capex”
 - ◆ No recognition of system expansion and asset condition upward drivers
 - ◆ No recognition of real pay growth in the economy
 - ◆ Future efficiencies contain overlap, error and arbitrary exclusions
- ◆ Reducing activity levels to align with Ofgem’s targets would lead to reduced network reliability

Load-related capex

Load-related capex in the round

- ◆ We agree on the desirability of using revenue drivers/adjustment mechanisms for ‘uncertain’ spend
- ◆ However, still need a baseline projection for load-related capex for
 - ◆ Financial modelling
 - ◆ As a baseline for adjustment
- ◆ Deal first with baselines and then with the adjustment/incentivisation mechanisms

Ofgem's proposals - electricity

- ◆ 2000/1-2004/5
 - ◆ Deemed efficient
- ◆ Deductions from our 2007/8-2011/12 plan
 - ◆ 13% “entry volume adjustment”
 - ◆ 2% “avoidable early replacement”
 - ◆ 4% “double counting”
 - ◆ 6% “scope for improved procurement” / above inflation unit cost increases for further review”
- ◆ 2005/6 and 2006/7
 - ◆ Treated as forecast years, thus deductions broadly consistent with Ofgem's treatment of our 2007/8-2011/12 plan

Ofgem's proposals - gas

- ◆ 2001/2-2005/6
 - ◆ £75m of investment re increased entry capacity at St Fergus deemed inefficient
- ◆ Deductions from our 2007/8-2011/12 plan
 - ◆ 58% “entry volume adjustment”
 - ◆ 8% “scope for improved procurement” / above inflation unit cost increases for further review”
- ◆ 2005/6 and 2006/7
 - ◆ Treated as forecast years, thus deductions broadly consistent with Ofgem's treatment of our 2007/8-2011/12 plan

Our initial response (1)

- ◆ We need detailed feedback from Ofgem to comment on their assumptions
- ◆ 2005/6 and 2006/7 are completed/contractually committed and so PCR should update for this information
- ◆ Ofgem's treatment of our procurement costs is hard to justify in the face of an inflationary market place
 - ◆ Steel costs
 - ◆ Pipeline build programme
 - ◆ Utility investment programmes
- ◆ As with non-load investment, need to reach agreement on likely future trend of unit costs

Our Initial response (2)

- ◆ We expect revenue drivers to deal with uncertainties but large proportion of load related investment is “validated”:
 - ◆ Capacity rights purchases through gas entry auctions
 - ◆ Agreement of ARCA for gas exit
 - ◆ Bilateral agreements and commitment to Final Sums for electricity entry and exit

Adjustment mechanisms and incentives

Ofgem's proposals

- ◆ Increased use of revenue drivers to deal with uncertainty
- ◆ Baselines set on the basis of actual system capability
- ◆ Simple or sophisticated UCAs
- ◆ Five year rolling incentives
- ◆ Assumption of interruption or capacity swap before investment
- ◆ Increased use of penal-only incentive schemes
 - ◆ Implicitly for new investment
 - ◆ Explicitly for electricity network reliability
- ◆ Question mark over extent to which investment purely and mechanically driven by user commitment

Our initial response

- ◆ Supportive of overall approach but current package not acceptable, not least because
 - ◆ Gas baselines above actual system capability
 - ◆ UCAs lower than likely investment costs plus exposed to these for up to two price control periods
 - ◆ Proposed timing of incentive-driven cash flows could exacerbate financeability issues
 - ◆ Potentially huge downside on proposed gas investment incentive
- ◆ Overall
 - ◆ Proposals align poorly with our overall licence obligations
 - ◆ Downside dominates

Non-load related capex

Ofgem's proposals - electricity

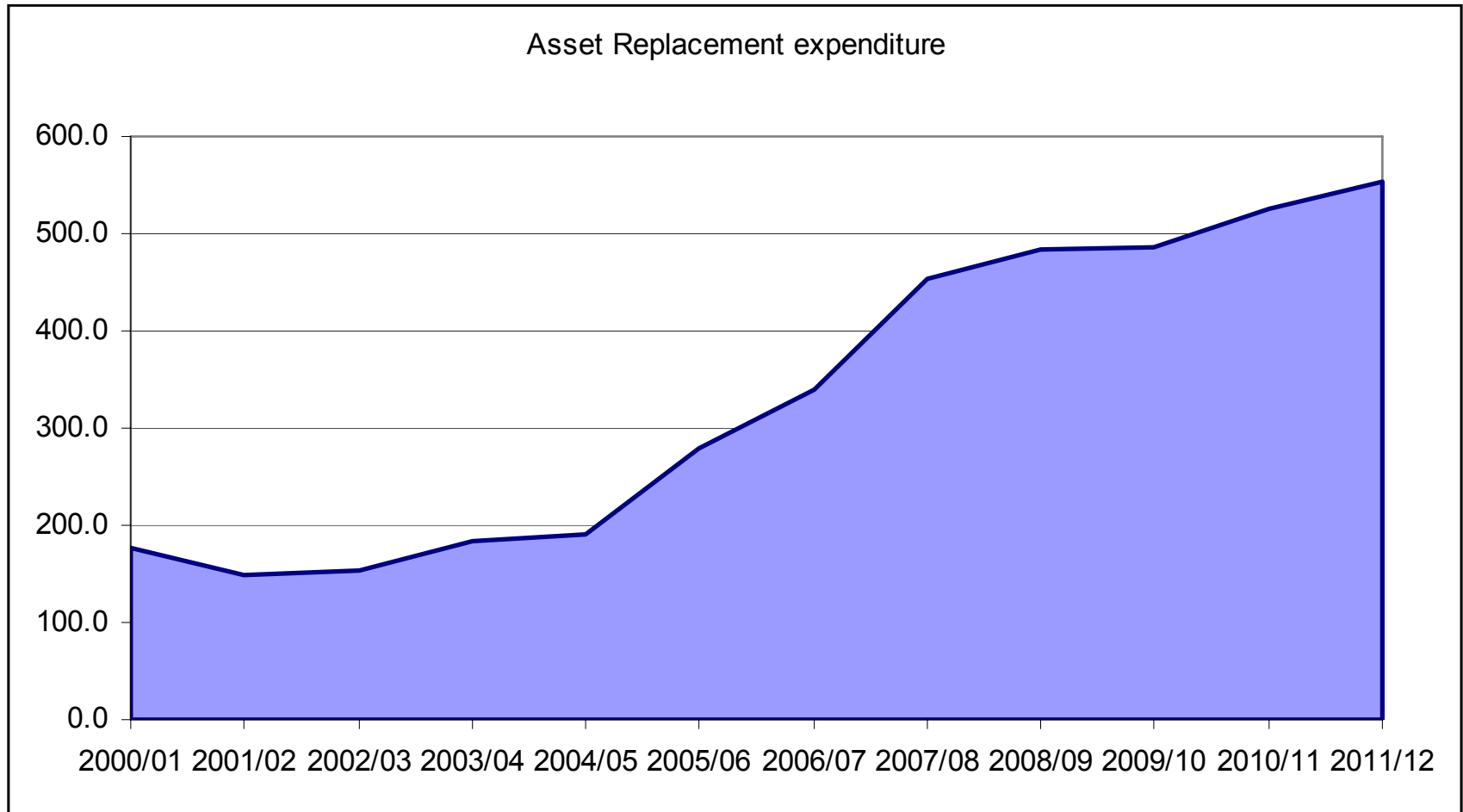
- ◆ 2000/1-2004/5
 - ◆ Deemed efficient
- ◆ Deductions from our 2007/8-2011/12 plan
 - ◆ 26% “lower level of asset replacement and refurbishment is required with more efficient unit costs”
 - ◆ 9% “scope for improved procurement” / above inflation unit cost increases for further review”
- ◆ 2005/6 and 2006/7
 - ◆ Treated as forecast years, thus % deductions are as for the 2007/8-2011/12 plan
- ◆ Ofgem's Initial Proposals (2005/06 – 2011/12):
 - ◆ 33% cut in overhead lines investment
 - ◆ 27% cut in switchgear investment
 - ◆ Further £128m cut in other plant types
 - ◆ Further procurement efficiency of £114m

Our initial response

- ◆ Need detail on the basis for Ofgem's proposals but our own view is unchanged
- ◆ We are a responsible asset manager
 - ◆ Had to overspend to maintain reliability and to operate efficiently
 - ◆ Risk taking vs benefit of less asset replacement not economic to UK
- ◆ We have set out what we believe is required to maintain network performance
 - ◆ Based on robust, extensive asset condition information
 - ◆ In context with the scale and age of the network

Asset replacement investment profile

Scale of expenditure forecast is large relative to the recent past...



Asset replacement investment profile

... but not large in terms of the lifecycle and size of the network

Replacement cost of relevant part of network \approx **£15.5bn**

Condition-informed weighted asset life of relevant network assets \approx **46 years**

Majority of relevant assets installed between 1961 to 1970

◆ Replacement rates

- ◆ Recent historical replacement rate \approx **£150m p.a.**
- ◆ Long-run steady state \approx **£335m p.a.**
- ◆ Installation rate \approx **£900m p.a.**
- ◆ Our plan \approx **£500m p.a.**

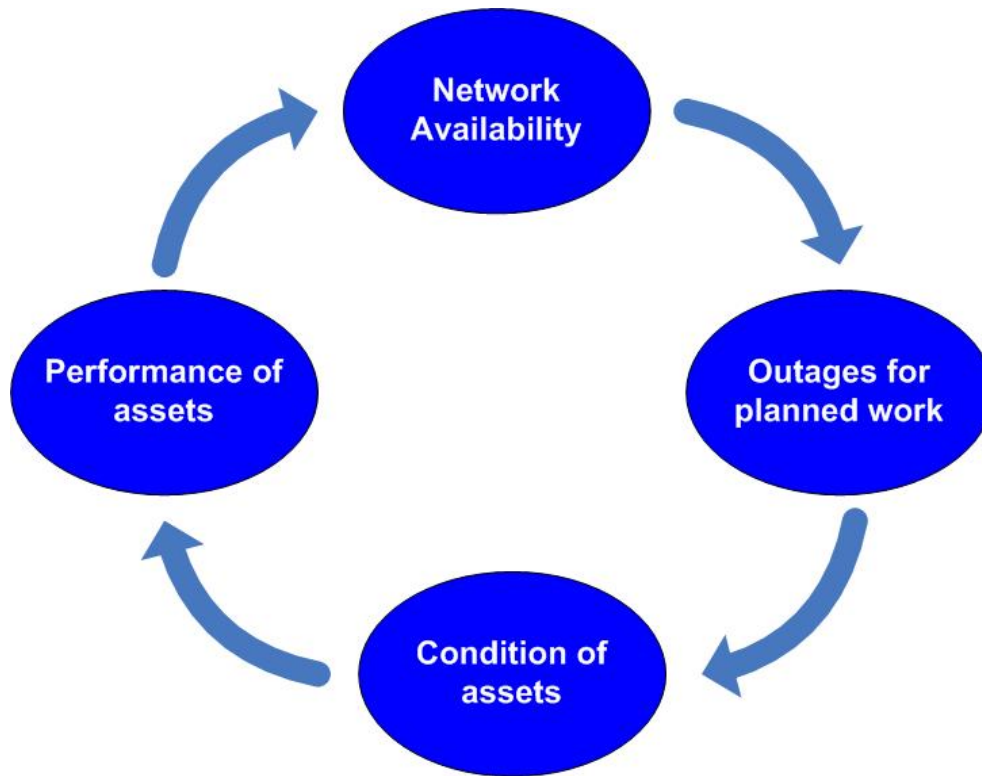
Why is our investment plan as it is?

- ◆ We understand
 - ◆ The condition of our assets and impact of assets failing
 - ◆ The drivers and rates of deterioration of those assets
- ◆ The asset replacement plan is based on assets being replaced just before the probability of failure becomes unacceptable
 - ◆ Assets replaced on the basis of **specific, detailed** condition information
 - ◆ Capital plan kept under constant review to reflect latest condition information
 - ◆ Replacement plans only identify sufficient replacement to **maintain** the existing performance of the network

Short term consequences of spending less

- ◆ More assets at risk of failure
- ◆ Increased risk of loss of supply
 - ◆ Wide impact on consumers
 - ◆ Long time to replace or repair failed assets
- ◆ Increased risk of safety and environmental incidents

Long term consequences of spending less



- ◆ Increased asset failures
- ◆ More unplanned work
 - ◆ Increased opex and capex costs
 - ◆ Increased outage/resource constraints
- ◆ Ultimately, deterioration of network beyond the point of recovery

Ofgem's proposals - gas

- ◆ 2001/2-2005/6
 - ◆ Deemed efficient
- ◆ Deductions from our 2007/8-2011/12 plan
 - ◆ 30% of our emission reduction investment plan
 - ◆ 33% less asset replacement
 - ◆ 5% overall deduction for “scope for improved procurement”
- ◆ 2005/6 and 2006/7
 - ◆ Treated as forecast years, thus deductions broadly consistent with 2007/8-2011/12 plan

Our initial response

- ◆ Need detailed feedback but our own view is unchanged
- ◆ Our forecast sets out what we believe is required to
 - ◆ Meet legislative requirements with respect to emissions
 - ◆ Maintain the existing assets in serviceable condition to maintain security of supply
- ◆ Consequences of spending to Ofgem's plans
 - ◆ Loss of flexibility in network

Financial Issues

Rate of return/financeability

- ◆ Early days on this
 - ◆ Main Ofgem RoR advice due for August
- ◆ Points to note at this stage
 - ◆ Pleased that Ofgem intend to deal with the NGET depreciation 'cliff face'
 - ◆ DPCR4 RoR at top of relevant range because of the investment focus of the review - not obvious why this should not apply to TPCR
 - ◆ Major proposed break with DPCR4 (and with most other price reviews of the last ten years) on treatment of financeability – viz. any financeability issues assumed to be dealt with via equity injection
 - ◆ Issue of the implications of this for RoR, both
 - ◆ 'Narrow' transactional costs raised by Ofgem and
 - ◆ Potential wider impact on the nature of the National Grid investor base

Pensions

- ◆ Proposals on 'legacy' pensions inconsistent with
 - ◆ Ofgas encouragement for Centrica divestment
 - ◆ Options available at the time on pension splitting
 - ◆ Practice at the time on risk sharing
- ◆ Proposals on ERDCs
 - ◆ Intrinsically unreasonable
 - ◆ Inconsistent with both the outcome of DPCR4 and the reasons given for that outcome
 - ◆ Appear to disincentivise honest and full provision of information to Ofgem

Summary

Purpose of our spending plans

- ◆ Facilitate markets through network reinforcement and extension
- ◆ Maintain network reliability
- ◆ Maintain or improve the safety, physical security and environmental performance of the networks

while operating efficiently

Consumer cost and benefits

- ◆ Incremental price impact of our plan on domestic consumers
 - ◆ £2.20 p.a. for Gas consumers
 - ◆ Of which increased replacement capex = 10p
 - ◆ £1.25 p.a. for Electricity consumers
 - ◆ Of which increased replacement capex = 25p
- ◆ Benefits
 - ◆ A network that responds to market developments
 - ◆ The reliability that we believe customers expect
 - ◆ Responsible safety and environmental performance

End
