Overview of TPCR Initial Proposals – Draft Impact Assessment

EOWG 11

Draft Impact Assessment

- Appendix 17 includes a Draft IA of the proposals outlined in the Third TPCR Consultation
- Initial, conservative assessment of net benefits to customers: £20m-£67m (in PV terms)
- Conservative estimate because:
  - Cost estimates often "worst case" in nature
  - Variety of methods considered to extrapolate cost submissions and most conservative approach used to inform "low case" net benefits
  - Only three main benefit categories quantified (other benefits assessed on a qualitative basis)
- This is only a draft IA. We plan to perform at least one further impact assessment, informed by more detailed drafting by NGG NTS of potential business rules or UNC text

Draft IA: benefits (1)

Benefits:

- Three quantitative benefits identified:
  - Efficient NTS investment signals
  - Non-discriminatory allocation of capacity products between RDNs and IDNs
  - Reduced incidence of ARCAs
- Qualitative benefits:
  - Efficient network development and system operation
  - Preventing undue discrimination (firm v interruptible / GDNs v TCCs)
  - Promotion of competition
  - Appropriate allocation of risk
  - Simplicity and transparency

Draft IA: benefits (2)

Benefit 1: Efficient NTS investment signals

Present value benefits (£m) 2005/6 prices	High case	Base case	Low case
NTS incremental exit capacity saving	8%	6.5%	5%
PV incremental exit capacity saving 6% discount rate (£m)	44.9	37.6	30.3
PV incremental exit capacity saving 3.5% discount rate (£m)	59.1	49.3	39.4

More efficient NTS investment and reduced risk of stranded assets arising from:
- signals in advance of capacity needs
- financially backed long term signals
-1 in 20 obligation with greater clarity of responsibility
- capacity substitution obligation
- incentivisation of efficient trade-offs

Draft IA: benefits (3)

Benefit 2: Non-discriminatory allocation of capacity products

Present Value Benefits (£m) 2005/06 Prices	High Case	Base Case	Low Case
Percentage impact to comparative regulation opex improvement	6%	**5%**	4%
PV of Non discriminatory allocation of capacity products 6% Discount Rate	25.2	**21.0**	16.8
PV of Non discriminatory allocation of capacity products 3.5% Discount Rate	34.5	28.8	23.0

Potential for discrimination in favour of RDNs:
- favourable allocation of long and short term exit capacity rights
- potential for retained GDNs to gain under their incentives and/or avoid investment
- assumed 5% of comparative efficiency benefits identified as part of GDN sales as base case

Draft IA: benefits (4)

Benefit 3: Reduced incidence of ARCAs

Present Value Benefits 2005/06 Prices	High Case	Base Case	Low Case
Average number of ARCAs resulting in dispute, per annum	1 in 2	**1 in 3**	1 in 4
Average avoided ARCA negation costs, per annum	1.4	**0.9**	0.7
PV of costs saved through reduced requirement for ARCAs 6% Discount Rate (£m)	14.8	**10.0**	7.5
PV of costs saved through reduced requirement for ARCAs 3.5% Discount Rate (£m)	18.7	**12.6**	9.6

- Transitional arrangements: NTS users enter into ARCAs to reserve incremental capacity requiring system reinforcement
- Enduring arrangements: UNC signatories do not need to enter into an ARCA. Cost savings:
  - negotiation and disputes for participants
  - disputes for Ofgem

Draft IA: benefits (5)

Summary of base case benefits

	Present Value Quantitative Benefits	Additional Qualitative Benefits
Efficient network development and system operation	£37.6 m	✓
Preventing undue discrimination	£21.0 m	✓
Promotion of competition	-	✓
Appropriate allocation of risk	-	✓
Simplicity / transparency	-	✗
Preservation of security of supply	-	✓
Clear and appropriate accountability and responsibility	£10.0 m	-
Total Quantified benefits relative to the transitional arrangements (2005/6 prices)	**£68.5 m**	

Draft IA: costs (1)

Costs:

- In April 2006, Ofgem issued separate cost pro formas to:
  - Shippers and TCCs
  - Gas transporters and agency
- All respondents asked to provide upfront implementation costs and ongoing annual costs
- Assumptions document and guidance document attached
- Fourteen submissions received
- Full cost submissions and adjusted costs (removal of outliers) included in cost analysis
- Three different methods of extrapolation adopted
- Costs to both GTs and industry participants/customers in other jurisdictions considered but not included in calculation

Draft IA: costs (2)

- Shipper estimates:
  - Total upfront costs likely to be incurred by shippers of £3m
  - Total ongoing potential costs of £1.3m per annum
- Three approaches to extrapolate respondent costs:
  - A: pro-rate average shipper cost per NTS offtake point served across total TCC supply points and NTS storage sites
  - B: assume estimated costs incurred by lowest cost respondent are representative of the fixed costs of a non-respondent shipper
  - C: pro-rate shipper responses by their share of firm and interruptible NTS throughput to NTS directly connected supply and NTS storage sites (excluding NTS interconnectors)

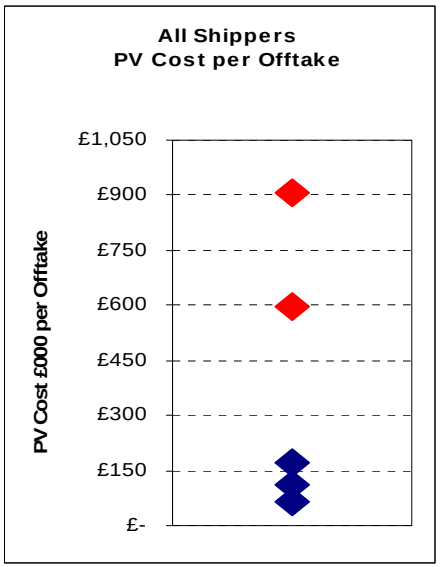
Draft IA: costs (3)

Shipper estimated cost and extrapolation – 6% discount rate

£ million (2006 prices) 6% Discount Rate	Up front costs	Ongoing costs	Present Value
Respondent Total	3.0	1.3	13.2
Method A: Cost per offtake extrapolation	6.3	2.7	28.1
Method B: Fixed cost extrapolation	7.4	2.4	26.5
Method C: Throughput cost extrapolation	5.9	2.6	26.2

Draft IA: costs (4)

- Cluster analysis shows two outliers
- Cost data adjusted by removing outliers



Adjusted shipper estimated costs – 6% discount rate

£ million (2006 prices) 6% Discount Rate	Up front costs	Ongoing costs	Present Value
Adjusted Respondent Total	1.4	0.5	5.7
Method A: Cost per offtake extrapolation	3.0	1.2	12.1
Method B: Fixed cost extrapolation	5.8	1.7	18.9
Method C: Throughput cost extrapolation	2.8	1.1	11.3

Draft IA: costs (5)

- Assumed cost per TCC: £10,000 a year (PV: £5.1m-£6.7m)
- PV of storage operator costs (for storage sites with two or more shippers): £2.0m - £2.5m
- Total TCC cost: £7.0m (at 6% discount rate)

Draft IA: costs (6)

GT costs and other costs

- NGG NTS, GDN and agency costs associated with implementation of enduring offtake should not be passed through to customers
- However, consulted GTs on costs implications of reform
- Estimate of GT costs:
  - £24.5m – pro-rated by average cost per offtake
  - £20.0m – fixed cost pro-ration
- Consider these costs to be conservatively high as it is not clear that all of the submissions included costs that are necessary and efficient
- Cost to industry participants and customers in other jurisdictions considered but not quantified

Draft IA: costs (7)

PV of shipper and TCC costs

£ million (2006 prices)	High Case	Base Case	Low Case
Present value of estimated overall shipper & TCC costs **6% Discount Rate**	35.1	22.5	18.3
Present value of estimated overall shipper & TCC costs **3.5% Discount Rate**	45.2	28.9	23.6

Draft IA: net benefits

Summary of cost and benefits cases

£ million (2006 prices) – 6% discount rate	**High case**	**Base case**	**Low case**
Benefits estimates	84.8	68.5	54.6
Costs estimates	35.1	22.5	18.3

Total PV of net benefits to customers

£ million (2006 prices)	**High case**	**Base case**	**Low case**
Net benefits to customers - 6% d.r.	66.5	45.9	19.5
Net benefits to customers – 3.5% d.r	88.8	61.8	26.8

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