

Gas System Operator Incentives Initial Proposals for 2011/12 & 2012/13

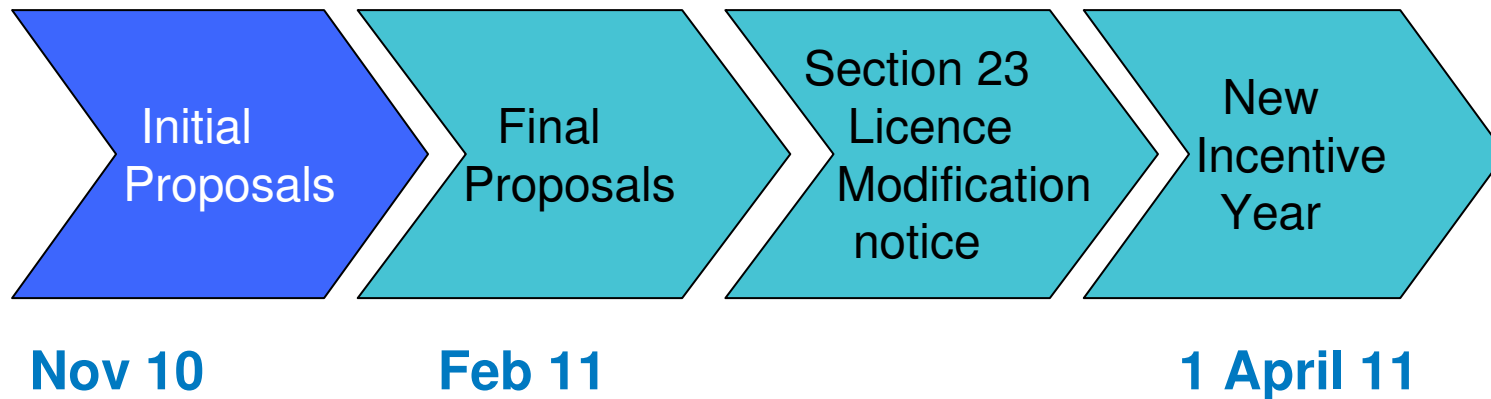


Ritchard Hewitt & Darren Lond. 4th November 2010

Agenda

- Incentive Review timetable
- Operating Margins
 - Background
 - Incentive Initial Proposals
- Environmental
 - Background
 - Initial Incentive Proposals
- Next Steps & Questions

Incentive Review Process



- A review of two incentives is currently taking place for incentive years 2011/12 and 2012/13.
 - Operating Margins
 - NTS Environmental

Operating Margins



What is Operating Margins?

- Gas available to the system to deal with system stresses both pre-emergency and in an emergency. For example:
 - Supply failure,
 - Unanticipated demand changes,
 - Failure of an NTS pipeline / associated equipment,
 - To manage orderly run-down of the system

- **Potential providers**
 - Storage
 - LNG Importation with Storage
 - NTS offtake reduction & supply increase (following recent Safety Case change)

Background

- A number of uncertainties have been considered:
 - Impact of NGLNGS regulated price review :
 - Level of prices for OM services from NGLNGS
 - Potential effect on market participants' tender prices.
 - Potential suspension of regulated prices
 - Type of regulation, price cap or revenue cap?

Background (cont.)

- OM requirements
- Potential for OM utilisation
- External factors that influence market offering OM
- Further development of contestable market
 - New entrants
 - Growth in LNG Importation

Initial Incentive Proposals

- **Operating Margins incentive**

- Ofgem's July Open Letter asked NG to consider arrangements to cover the next 2 years.

- **3 options have been identified:**

1. Cost Pass through subject to Regulatory review
2. Bundled incentive scheme including all Holdings and Utilisation costs
3. Separate incentive schemes for Holdings and Utilisation costs

Option 1 : Pass through of costs

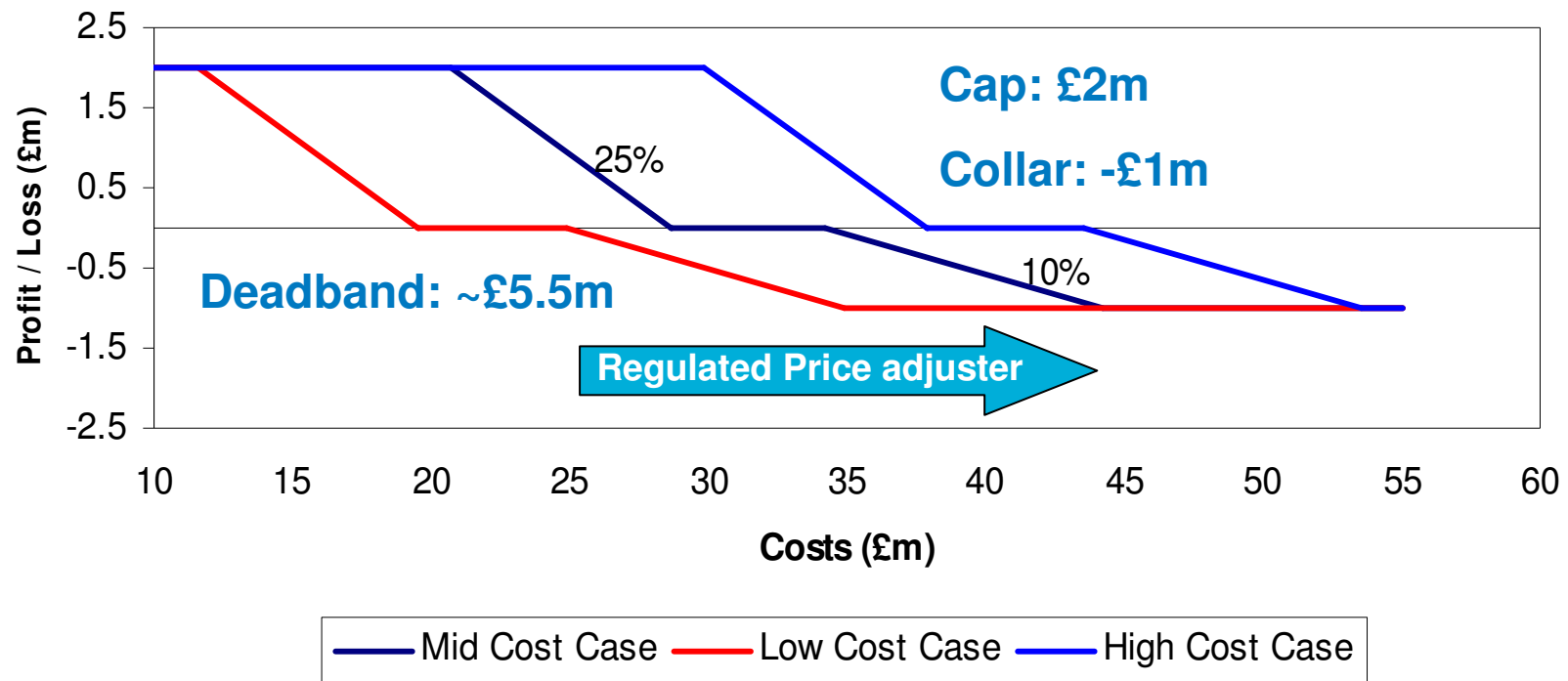
- No Change Option:
 - Pass through would cover all Holdings and Utilisation costs
 - No direct incentive
 - Efficient and economic costs would be recovered from industry, following regulatory scrutiny
 - Prevents windfall profits or losses for National Grid resulting from range of uncertainties

Option 2 : Bundled Incentive Scheme

- Single incentive scheme to include all Holdings & Utilisation costs
- **Key features:**
 - Cost Target adjustments for National Grid LNG Storage regulated price review outcome
 - Low sharing factors, cap, collar & deadband limit undue reward or penalty
 - Utilisation
 - Volume NG exposed to is capped to an average level i.e. Volume cap
 - If high volume is utilised, incentive on weighted average cost of all utilisations pro rated to volume cap.
 - Reconsider incentive:
 - If LNGS regulated price suspension is extended to further OM requirement types
 - If revised LNGS regulated prices are outside of the range of analysis or if there is a change in form of pricing

Option 2 : Bundled Scheme – Structure

Proposed OM Incentive Structure - Holdings and Utilisation

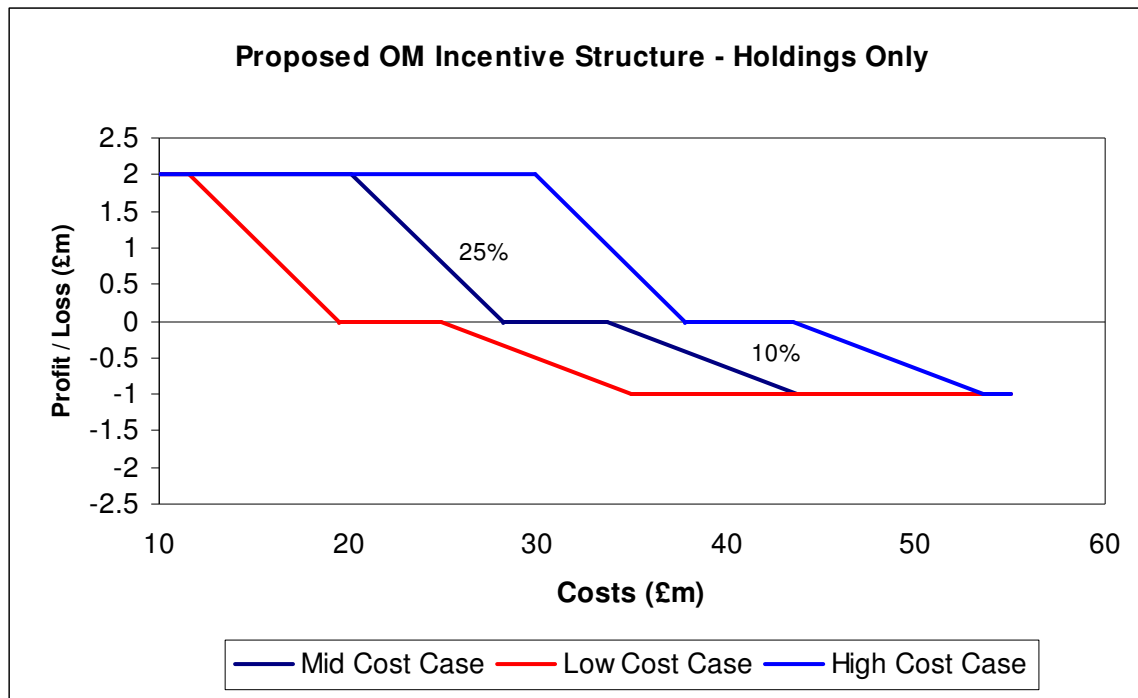


At current regulated prices (low case), deadband £19.5m - £25m

Option 3 : Unbundled Incentive Scheme

- Separate Holdings and Utilisation incentives:
 - Minimises risk of Utilisation outside NG control impacting on Holdings performance.

Holdings

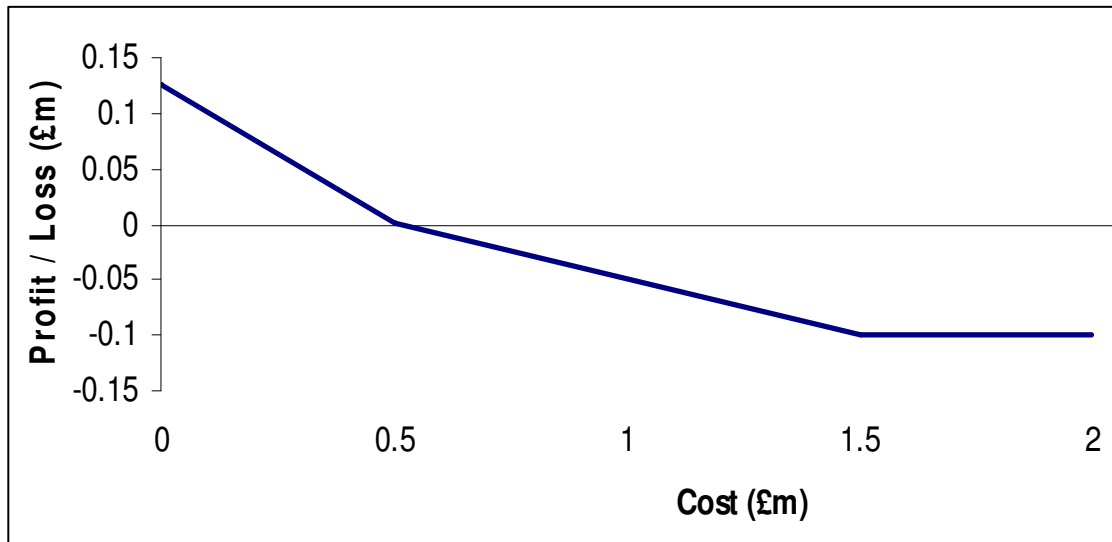


- Sharing factors:
 - 25% upside
 - 10% downside
- Deadbands ~£5.5m
- £19m - £24.5m at current regulated prices
- Cap £2m
- Collar -£1m

Option 3 : Unbundled Incentive Scheme

- Utilisation volume cap
 - Volume NG exposed to is capped to an average level
 - If high volume is utilised, incentive on weighted average cost of all utilisations pro-rated to volume cap.
 - Reduced exposure to risk of major event outside NG control

Utilisation



- Cost Target £0.5m
- Sharing factors:
 - 25% upside
 - 10% downside
- Cap £0.125m
- Collar -£0.1m

Operating Margins

■ Year 2

- Holdings Target in both Bundled and Unbundled schemes based upon Year 1 outturn + RPI uplift
- Deadband as year 1 but centred around year 2 target cost
- Utilisation Target as Year 1 + RPI uplift
- Same cap, collar & sharing factors as Year 1

- Reconsider Incentive:
 - If volume requirement change is greater than +/- ~10%

NTS Environmental Incentive



What is the NTS Environmental Incentive?

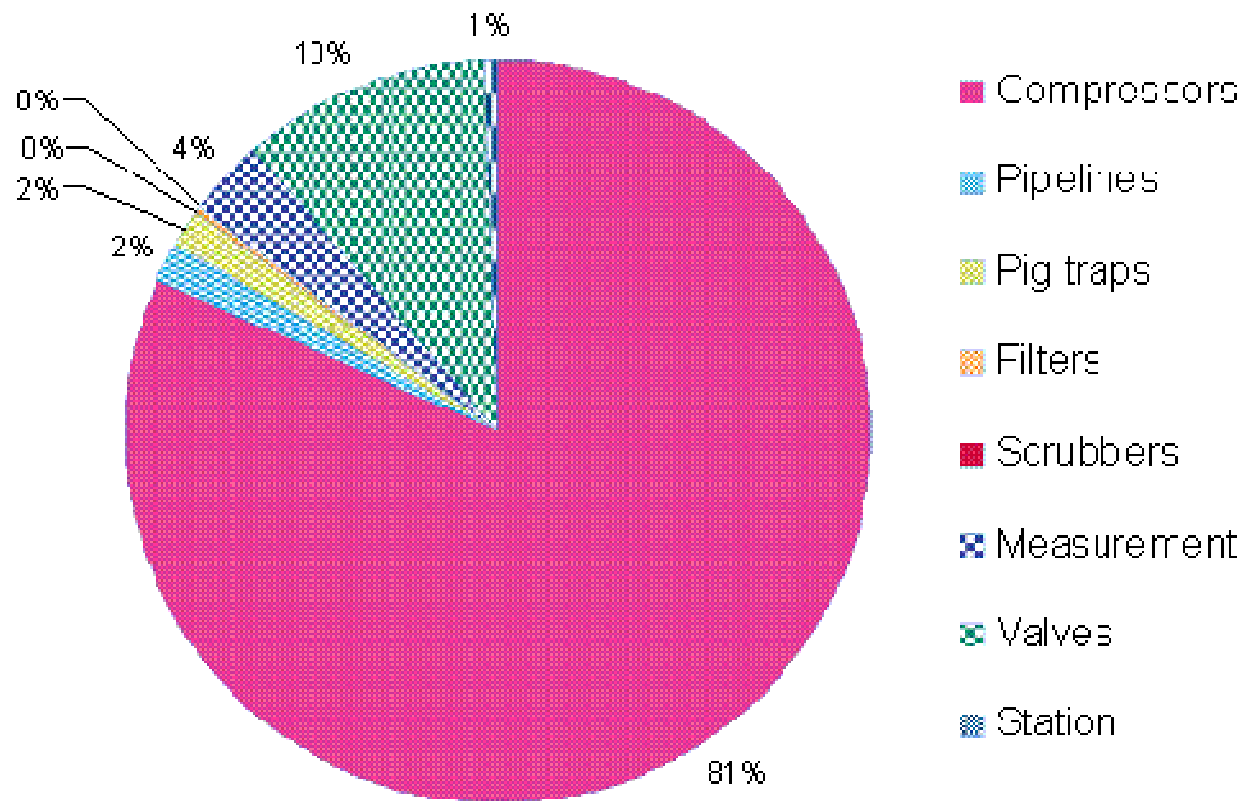
- Venting natural gas is currently an unavoidable consequence of the normal operation of the NTS

- **When do we vent?**
 - Commissioning
 - De-commissioning
 - Operation
 - Maintenance

What is the NTS Environmental Incentive?

Compressor venting is the major source of NTS venting.

Currently not all vents are measured



Initial Incentive Proposals

■ Considerations

- Safety obligations and considerations
- Level of control available to the NTS to manage venting
- Current assets and systems of the NTS
- Technological development and other emissions reduction options
- Potential development cost / timescales

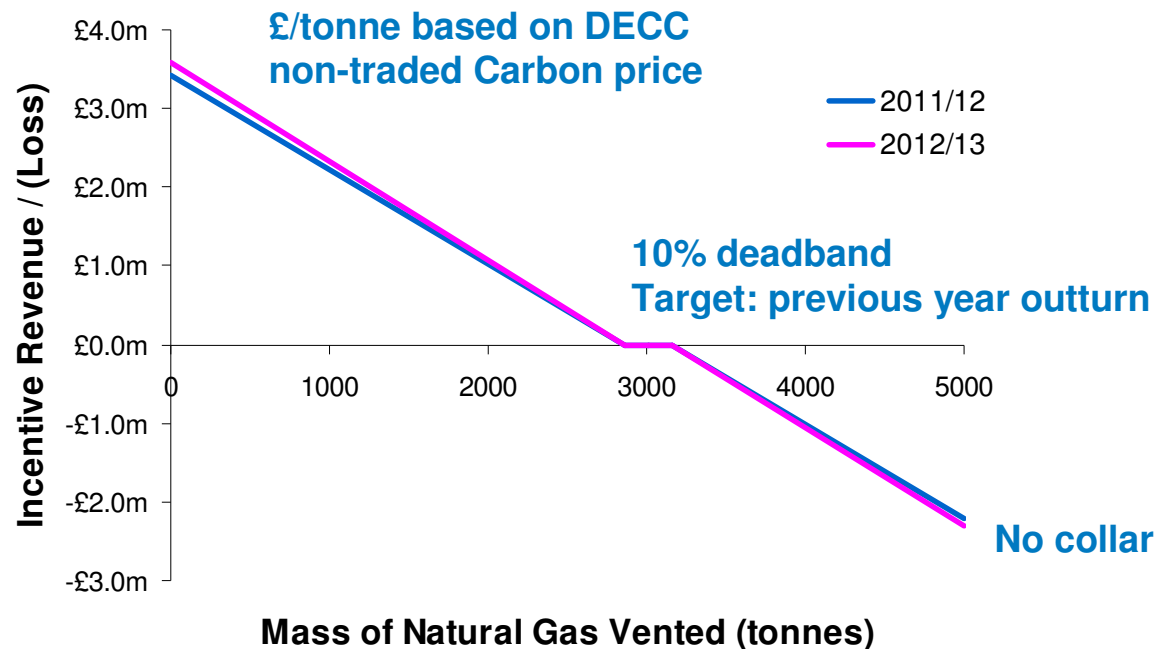
■ 2 options considered:

- Short term proposal
- Full internalisation of costs: Zero target, downside only

NTS Environmental Incentive

– Short term

- Propose to update the current incentive for the next 2 years
- Covers compressors only (Currently only compressor venting has auditable measurement)
- Marginal environmental cost included in operational decisions



NTS Environmental Incentive

– Short term

- Based on an achievable benchmark with upside and downside potential.
- Does not penalise NG for venting necessary to meet current Safety obligations
- Additional 2 year funding proposal for defined priority areas:
 - Understanding venting (drivers and volume per event)
 - Enabling measurement & progress towards finding a benchmark
 - Develop and progress alternatives to eliminate / reduce emissions including assessment of needs to enable future NTS implementation
- £2-3m Budget to be managed & agreed against defined set of criteria
 - Annual report on progress

NTS Environmental Incentive

– Medium term considerations

- Goal to reduce emissions to a sustainable economic level.

- **Possible Incentive Scheme for emissions**
 - Target: Non-zero benchmark
 - Not all emissions can be reduced - safety & efficiency tests
 - Activity adjustment to move benchmark with planned work levels
 - Marginal cost (slope) either
 - DECC non-traded cost of Carbon as government policy; or
 - A traded cost of Carbon to enable all emissions to be on the same cost basis

- Investment discussions (part of RIIO T1) in parallel with incentive benchmark discussions

Full Internalisation of Costs

Zero target, downside only scheme

- Ofgem's July Open Letter asked National Grid to look at full internalisation of costs.
- Not all of National Grid's venting is controllable or avoidable
- Zero target is not achievable in the foreseeable future even with large (>£2bn) investment
 - Safety
 - Some identified options still in R&D
 - Investment would take time to deliver
 - No funding for investment
 - New 'vs' Existing
- Investments need to be economic and efficient against environmental cost saving and against other alternatives available to society.

Next steps

- Anticipate Initial proposals being published 5th November 2010
- 4 week consultation period
- Final Proposals published February 2011