

National Grid LNG facilities price control - Initial Proposals

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Overview:

National Grid Liquefied Natural Gas (NG LNG) runs three storage facilities that provide a combination of commercial and regulated services. The regulated services they provide are mainly to National Grid Gas (NGG) to help them operate and manage the gas transmission system. The price they charge for commercial services is subject to market forces, but the price they charge for the regulated services is subject to a price cap. The level of the price cap was last reviewed in 2008, but we now believe that there are good reasons to carry out a further review of the cap.

This document presents our Initial Proposals for the price control of the regulated services supplied by these facilities. It sets out our views on the scope, form and duration of the control, along with the costs and revenues that we consider should be allowed in setting the control.

We will be setting out our Final Proposals for this control in January 2011.

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Context

National Grid (NG) owns three liquefied natural gas (LNG) facilities that provide a combination of commercial services to gas shippers and regulated services to both National Grid Gas (NGG) and Scotia Gas Networks (SGN).

All of these regulated services are provided at prices set out in Special Licence Condition C3 of the gas transporter's licence ("C3 prices"). These regulated prices were last reviewed in 2008; since then, there have been a number of significant changes affecting the NG LNG business. NG LNG considers that the facilities are no longer commercially viable at the current price levels. Therefore, it has asked us to reconsider the level of the C3 prices.

This document follows on from a previous open letter on the subject, and sets out our Initial Proposals on the new control.

Associated Documents

- 'National Grid Liquefied Natural Gas facilities price control – Open letter' 17/08/2010 Ofgem (Ref: 111/10):
<http://www.ofgem.gov.uk/Networks/Trans/GasTransPolicy/Documents1/FINAL%20National%20Grid%20Liquefied%20Natural%20Gas%20facilities%20price%20control.pdf>
- 'LNG Storage price control - Final proposals' 19/12/2007, Ofgem (Ref:298/07):
<http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=19&refer=Networks/Trans/GasTransPolicy/LNGPriceControl>
- 'Operating Margins (OM) Contestability 2010: Decision Letter' 19/02/2010, Ofgem:
<http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=1&refer=Networks/Trans/GasTransPolicy/LNGPriceControl>

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Summary

National Grid Liquefied Natural Gas (NG LNG) operates three LNG storage facilities that provide both commercial and regulated gas storage services. It provides commercial storage services to shippers and the price it can charge is dictated by the market for gas storage. The regulated services it provides are system support to National Grid Gas (NGG) and gas tankering to supply areas in Scotland that are not connected to the transmission or distribution networks. These regulated services are subject to a price cap as specified in Special Condition C3 of the gas transporter's licence. This price regulation is intended to protect consumers from potential abuse of NG LNG's dominance and avoid cross-subsidies between businesses.

These regulated prices were last reviewed in 2008. Since then, there have been a number of changes in the marketplace. This has led to NG LNG asking for a review of the regulated prices.

In August 2010, we issued an open letter which informed industry of our intention to conduct this review. We asked for views on the scope, form and duration of the control. We received three responses to that letter. We also held a series of meetings with NG LNG and obtained data to determine the extent of the changes to the business since the 2008 control.

Having considered the responses and data received, this document sets out our Initial Proposals for the revised control. We are proposing:

- the form of the price control should continue to be price caps
- the control should only deal with the short-term funding of the facilities until 2013
- long-term funding issues should be considered as part of the upcoming transmission and gas distribution price controls
- given the scale and proposed duration of the price control and the timing of decisions, we do not propose to employ RIIO principles in developing our Initial or Final Proposals

We have considered the operating and capital expenditure submissions by NG LNG with regards to the costs they consider should be included to calculate the price cap levels. Our views on the appropriate levels are given in this document. We and NG LNG are in general agreement as to the levels of operating costs and expected revenues (both regulated and commercial). But, significant differences remain with respect to the treatment of depreciation and capital expenditure levels. . We expect further discussion with interested parties prior to the Final Proposals, which will be issued in January 2011.

NG LNG has announced that it will close the Partington site around 2013. This is because NGG has indicated to NG LNG that due to other system developments, Partington will not be required for system support beyond that time. We have reiterated our view that consumers should not be responsible for the decommissioning costs of any of the LNG sites. But we are keen to ensure that the site is decommissioned in a sustainable manner as far as possible. Therefore, we

would like to examine the potential for incentivising NG LNG through this price control to minimise the environmental impacts associated with this decommissioning process.

Our Initial Proposals imply the need for significant increases in the current price cap levels to allow NG LNG to provide these regulated services. On a site specific basis, the proposed increases are:

- Avonmouth: +205%
- Glenmavis: +85%
- Partington: +250%

We welcome views on our Proposals and invite responses to this document by 20 December 2010. Following consideration of any issues raised, we intend to issue our Final Proposals in January 2011.

1. Introduction

Chapter Summary

This sets out the background on the operation and regulation of National Grid's liquefied natural gas storage facilities.

Background

1.1. National Grid (NG) owns and operates three¹ liquefied natural gas (LNG) storage facilities that provide a combination of commercial and regulated services. These are situated at Avonmouth, Glenmavis and Partington.

1.2. These LNG facilities are located at the extremities of the National Transmission System (NTS). They were designed to deliver gas during a few days of high demand in each year. This was to ensure that National Grid Gas (NGG) could meet firm demand in line with its network planning requirements. They were considered to be a more economical solution than the construction of additional pipeline capacity in these locations.

1.3. The facilities operate by taking gas off the NTS and cooling it to about -165°C, where it becomes a liquid. It is then stored in tanks until it is required back on the NTS. At that point, the liquid gas is vaporised and injected back into the NTS. The process of cooling the gas into liquid, maintaining it at low temperatures and regasifying the liquid is a very energy intensive process, which makes the operation of the LNG storage facilities expensive.

Services Provided by LNG Storage Facilities

1.4. LNG storage facilities have particular characteristics that make them both expensive but useful. They are much more expensive to run than other forms of storage due to the liquefaction process. They are relatively slow to fill and have limited storage capacity. However, they can re-gasify large quantities of gas very quickly. These characteristics made LNG storage suited to providing rapid-response, but short-duration, support for the NTS. The types of service they provide are described below.

¹ NG LNG previously operated two further LNG facilities that provided regulated services. One

Operating Margins²

1.5. All three of the facilities have supplied Operating Margins (OM) services to NGG. OM is used to maintain system pressures when the system has been put under stress until other system management actions become effective. Typically, OM is used in the period immediately following a supply loss, demand forecast change or plant failure.

1.6. A portion of OM is kept in reserve to manage the orderly rundown of the system in an emergency. NGG must maintain a level of OM bookings in order to comply with its safety case³. The price at which NGG can procure OM services is limited by Special Licence Condition C3 of the gas transporter's licence.

1.7. Since the previous control in 2008, NGG has introduced competition in the tender process for OM services. This has allowed other market participants to compete with the NG LNG facilities for OM provision through supply increase/demand reduction contracts. This has allowed us to suspend the C3 prices for 2010/11 in relation to some⁴ of the OM requirements.

Scottish Independent Undertakings

1.8. SGN uses the tanker loading facility at the Glenmavis site to load road tankers which transport gas to five remote towns in Scotland known as the Scottish Independent Undertakings (SIUs). These are located at Stornoway, Wick, Thurso, Oban and Campbeltown. They total around 91km of pipes, which are owned by Scotia Gas Networks Ltd (SGN), and supply around 6,500 consumers with re-gasified LNG. Avonmouth and Partington have constructed tanker loading facilities which act as a back-up to Glenmavis in this provision.

1.9. This service is provided as part of a bilateral contract between NGG and SGN that formed part of the distribution network sales package. The prices charged for this service are also restricted to those specified in Special Condition C3 of NGG NTS's licence.

Resolution of Local Constraints

1.10. The Avonmouth LNG facility has, in the past, provided Constrained LNG. This allows NGG to meet its capacity obligations at remote parts of the network without

² Further information on Operating Margins can be found at:

<http://www.nationalgrid.com/uk/Gas/OperationalInfo/GasOperatingMargins/>

³ Under the Gas Safety (Management) Regulations 1996 SI 1996/551, the Health and Safety Executive (HSE) requires that gas transporters submit for approval (and comply with) a 'safety case', which details how they manage the safety of the network. The procurement of OM services is part of NGG's safety case obligations.

⁴ 'Locational - North', 'Non-Locational' and 'Orderly Rundown'

having to build additional pipeline capacity. NGG requires shippers who book capacity at a constrained LNG site to maintain minimum levels of gas in store, which reflect the volumes necessary to meet peak demand. Also, NGG has the right to require those shippers to flow gas onto the system under certain conditions of high demand. In return, shippers who are prepared to book constrained LNG are provided with a discount, reflecting the saving in investment in the pipeline system. Revenues received in relation to this service are subject to NGG's Constrained LNG incentive scheme.

Commercial storage services

1.11. In the past, NG LNG has provided commercial storage services to shippers at all three sites. As part of a strategic review of the facilities conducted in 2010, NG LNG has confirmed that it will no longer be offering commercial services at Glenmavis and Partington beyond the current gas storage year (ending 30 April 2011). At present, NG is still considering the situation at Avonmouth with regard to future commercial services⁵.

Regulation of the LNG storage facilities

Unbundling from Transco's Regulatory Asset Base

1.12. Historically, the LNG storage facilities formed part of Transco's Regulatory Asset Base (RAB). These assets (which at that time also included the Isle of Grain and Dynevor Arms sites) were removed from the RAB and a separate price control was put in place with effect from 1 April 1997. The rationale for the removal of these assets from Transco's RAB was in part to promote competition in what we viewed as contestable services. Our decision to unbundle these assets was supported by the Monopolies and Mergers Commission in 1997⁶ and by a subsequent Fair Trading Act investigation in 1999.

1.13. The 1997 price control for LNG storage facilities set price caps for the provision of services by these facilities. In 2000, Ofgem granted derogation for NG LNG to charge in excess of the regulated price caps in providing services to shippers (but not in providing services to NGG). This occurred in parallel with the introduction of auctions of capacity at these facilities. The 2002 Transco price control review renewed the regulated price cap in respect of services supplied by the LNG storage facilities to NGG but again allowed NG LNG to charge in excess of this price cap for other services. This allowed NG LNG to operate a proportion of the facilities on a commercial basis during these periods.

⁵ National Grid, 'LNG Storage Strategic Review - Further Announcement', 26 May 2010. Available at: <http://www.nationalgrid.com/uk/Gas/Ingstorage/Media/>

⁶ 'BG Plc: A report under the Gas Act 1986 on the restrictions of prices for gas transportation and storage services' 29 May 1997, Monopolies and Mergers Commission

Transmission Price Control Review 2007

1.14. In the Transmission Price Control Review (TPCR4) 2007-12, Ofgem sought views on amendments to the price regulation framework. We decided to amend the existing price caps such that, when considered in conjunction with auction revenues, they were likely to cover the forward looking capital and operating expenditure of the LNG storage facilities. These amended price caps were (and still are) linked to a reference market price for commercial storage services sold at the NG LNG storage facilities; if these market prices are higher, then the price caps default to these levels. Where the commercial prices are lower, then the C3 price caps prevail. This means that the C3 levels represent a price floor for the regulated services, rather than a price cap. Therefore, NG LNG is exposed to downside risk on volume of regulated services, but has upside benefit in relation to both price and volume.

1.15. TPCR4 also considered whether it was appropriate to reincorporate the LNG storage facilities into the NGG RAB. Although one element of capital expenditure in relation to the Glenmavis facility was allowed for in calculating the 2007-12 NGG RAB, we concluded that it was not appropriate for consumers to underwrite the long-term cost of facilities which might not be needed. We also confirmed our view that the decommissioning costs of these facilities should not be paid for by consumers.

1.16. Additionally, TPCR4 introduced a new licence obligation⁷ on NGG to establish a transparent and robust process for the competitive provision of the operating margins services currently being supplied by the LNG storage facilities.

1.17. It was intended that, if the terms of this new licence condition are met, then NG LNG storage facilities should be able to tender on the same basis as other potential storage providers. This would imply the disapplication of the current regulated prices for the provision of OM services as specified in Special Condition C3 of NGG's gas transporter licence.

LNG Price Control Review 2008

1.18. The C3 regulated prices were reviewed most recently in 2008. At that review, there was no change in real terms to C3 prices. They were set to endure until the earlier of: 2012; or, the establishment of OM contestability.

1.19. Since 2008, there have been a number of significant changes affecting the NG LNG business.

- As a result of a change in OM requirements by NGG, NG LNG chose to close its facility at Dynevor Arms. This site had previously supplied OM services in South Wales.

⁷ Special Condition C25

- In 2009, NG LNG offered tenders for long term commercial storage at its facilities, but it considered that the market demand for these services was very weak.
- Following the tender process for 2010/11 OM requirements, NGG has awarded some OM contracts to new providers, thereby reducing the provision of OM by NG LNG.
- Additionally, there has been a significant tailing-off of demand for the annual commercial storage product.

1.20. Therefore NG LNG set up a review of the long-term viability of Avonmouth, Glenmavis and Partington. Following this review, NG LNG has indicated it will no longer offer commercial services at Partington and Glenmavis, and that it may close the Partington facility around 2013.

1.21. At the time of the 2008 review, we agreed that once NGG established contestability in the provision of OM services, it may be necessary to review the C3 prices to take account of the outcome of the process. We have now been approached by NG LNG to conduct such a review. In light of the developments since 2008, we have agreed to this request and the open letter published recently set out our initial thoughts on the review⁸.

Current status of the part-regulated LNG facilities

1.22. Since the open letter, we have held bilateral meetings with NG LNG and visited the sites to get a better understanding of the issues NG LNG has raised. A brief site by site synopsis of key issues follows:

- The Partington site was commissioned in the mid 1970s and is approaching the end of its design life. It is situated near a densely populated suburb, and so poses a societal risk. The Health and Safety Executive (HSE) has confirmed that it would be desirable for the site to be closed down. Following confirmation from NGG that the site is not expected to be needed for regulated services post 2013, NG LNG has taken the decision to shut the site down from that point. In the meantime, it has ceased the liquefaction process on site, decommissioned two of its four tanks and stopped offering commercial storage services to reduce the potential risk.
- Glenmavis is the oldest of the operational sites, and is expected to reach the end of its design life in 2015. The site supplies gas by road tanker to the SIUs, and is also a key part of NGG's safety case for Glasgow supply. The facility is not fully functioning at the moment, as it has problems with one of its two storage tanks. The main plan for this site includes remediation work on the tanks to see them

⁸ 'National Grid Liquefied Natural Gas facilities price control - Open letter' (Ref: 111/10), 17 August 2010. Available at: <http://www.ofgem.gov.uk/Networks/Trans/GasTransPolicy/Documents1/FINAL%20National%20Grid%20Liquefied%20Natural%20Gas%20facilities%20price%20control.pdf>

through to 2015, by which time NG LNG expect NGG and SGN should have alternative plans in place to fulfil their respective service obligations. It is looking for the future of the facility to be resolved as part of the forthcoming RIIO-T1 and RIIO-GD1 price controls.

- Avonmouth is the newest of the three sites, and its facilities are in comparatively good condition. NG LNG consider that it has a viable future supplying both commercial and regulated services, and have submitted plans for refurbishment to prolong the site to beyond 2020.

2. Scope, form and duration of the price control

Chapter Summary

We issued an open letter on the price control in August 2010. This Chapter summarises the responses to our letter and sets out our Initial Proposals on the scope, form and duration of the control.

Questions

Question 1: Do you agree with our Initial Proposals on the scope, form and duration of the control?

Introduction

2.1. We issued an open letter in August which outlined the role of the NG LNG storage facilities and their current regulatory regime. We asked for responses regarding the scope, form and duration of the control. We also outlined our timetable for the process.

2.2. Ofgem received three responses to the open letter. These were from NG LNG, NGG and SGN. All the responses were marked as non-confidential and can be viewed on Ofgem's website as associated documents to our open letter. The following sections set out: our open letter views on the scope, form and duration of the control; respondents' views on these issues; and, our Initial Proposals on these aspects of the control.

Scope of the control

Ofgem's initial view

2.3. In order to meet deadlines associated with NGG's 2011/12 OM tender process, NGG require certainty on the C3 prices by mid-February 2011. This requires Ofgem to publish our Final Proposals and issue the section 23 notice by mid-January 2011. The timescales of this review are compressed, and so we proposed to limit the scope of this control accordingly.

2.4. Our initial view was that the review should only consider the funding required for the facilities' continued provision of the regulated services, until suitable alternatives can be found. Therefore, we proposed to exclude longer-term funding issues from the scope of this review and review them as part of the main Transmission and Gas Distribution controls.

Respondents' views

2.5. NG LNG agreed that the review should allow adequate funding to maintain operations until long-term arrangements can be put in place. It stated that as the assets are mainly used to provide regulated services, they would prefer to see them brought under the main gas Transmission and Distribution Price Controls. However, they recognised the challenging nature of the timescales, and the lack of time to conduct the necessary analysis to devise long term funding arrangements. As a result, they supported our initial view to exclude the long-term funding issue from the scope of this review.

2.6. NG LNG also expressed views as to what constituted "adequate" funding.

- In the previous control Ofgem, made an allowance for return and depreciation on one-third of the total LNG storage asset base. NG LNG considers this proportion should be increased, as the majority of the capacity of the sites is currently used to deliver regulated services.
- It also proposes that costs are recovered over the remaining economic lives of the sites. This implies investment at Partington should be fully recovered by 2013, with the same applied to Glenmavis to 2015 and Avonmouth to the end of its operational life. It claims that this would ensure that the costs of investments are recovered from those who benefit from them.
- Efficiently incurred costs relating to the year 2010/11 should be included in the review, as this was the point from which NGG was deemed to have met its contestability obligations under Special Condition C25.
- It also argued that costs relating to making a site safe should be funded as a regulated activity, though it acknowledged that this should not necessarily extend to site remediation costs.

2.7. NGG also supported Ofgem's view that the scope of the price control should be limited. It was concerned that any prolonged uncertainty with regards to the C3 prices could affect the levels of competition in the 2011/12 OM tender process. It also said uncertainty would affect NGG's ability to devise suitable incentives around the procurement of OM.

2.8. SGN was concerned that the proposed timescales do not allow enough time to consider properly all of the issues. It did not support Ofgem's intended timeline for the review, and proposed instead that all issues should be considered together as part of the next Transmission Price Control Review (RIIO-T1). This would allow the implications for the SIUs to be incorporated into the next Gas Distribution Price Control Review (RIIO-GD1).

2.9. SGN's allowed revenue for services to the SIUs is fixed until 2013, so it is concerned about its exposure to any increase in C3 prices as a result of the review. It stated that if the review proceeds in the proposed timeline, SGN should be indemnified from any changes to the C3 prices.

Ofgem's Initial Proposal

2.10. We set our previous Proposals, and NG LNG accepted, on the basis that once contestability had been established we would consider a review of the C3 prices. This trigger point with respect to contestability has been reached. Therefore, we do not think it appropriate to defer the review of the C3 prices to 2013 as SGN has proposed.

2.11. The 2011/12 OM tender process requires price certainty in order to attract the full range of potential participants. To facilitate this process, NGG needs to know the C3 prices prior to the middle of February 2011. On this basis, we do not have the scope to introduce further delay to allow due consideration of the longer-term funding issues.

2.12. Accordingly, our Initial Proposal is for the scope of this control to consider only the funding required for the facilities' continued provision of the regulated services up to 2013. We remain of the view that issues surrounding the funding of Avonmouth and Glenmavis post-2013 should be addressed at a later date.

2.13. The following chapter gives details of the costs we have considered in establishing our proposals for the C3 prices. However, the general issues raised by NG LNG above have been addressed as follows:

- We continue to provide for a return on only a proportion of the RAB, with some variation by site. This variation reflects the differing historical share of regulatory services provided by each site. We have not changed the proportions of historic assets receiving a return to the current usage levels, as this would represent a shift of costs and risks onto consumers without any share of previous benefits accrued. We do not believe this is appropriate.
- We intend to allow depreciation over the assets' economic lives, but where assets are being retired early, the asset design life should take precedence in order to avoid perverse incentives which might undermine incentives to maximise asset lives. Therefore, our initial proposals are based on assumptions which would set the depreciation of the residual values of Glenmavis and Avonmouth assets over five and 15 years respectively. However, the Partington site is closing before the end of its design life. We intend to allow depreciation on the Partington assets in line with their asset design life rather than their economic life, so that NG's shareholders will be expected to bear the costs of retiring the assets early.
- We will include 2010/11 costs and revenues when assessing the overall change in C3 prices for the 2011-13 period, as this is the time from which we deemed NGG had met its obligation with respect to the introduction of contestability for OM services..

2.14. We remain of the view that consumers should not bear decommissioning costs. We consider that this is consistent with the basis on which the facilities were originally separated from the Transmission RAB. NG's shareholders have enjoyed the benefits from commercial services and the transfer of the Isle of Grain site out of the regulatory ring fence, and so should be solely liable for any decommissioning and

stranding costs. However, we are keen to ensure that the sites are decommissioned in a sustainable manner. We are therefore minded to introduce an environmental incentive to facilitate this.

2.15. We will work with NG LNG between now and Final Proposals to explore this further. Possible aspects for incentivisation include:

- the restriction of greenhouse gas emissions during decommissioning to levels beyond the current regulatory and statutory requirements
- the improvement of visual amenity of the site post decommissioning
- the remediation of the site to standards beyond the current regulatory and statutory requirements

2.16. We have noted SGN's concern regarding its exposure to any changes in the C3 prices at Glenmavis. We have assessed the impact of our Initial Proposal against both SGN's total price control allowance and the specific component allowed for SIU services. Our current view is that this is not a material amount, especially in the broader remit of typical price control fluctuations. It would be up to SGN to make a case and to produce substantive evidence as to why this might be considered material before we could consider providing relief. We will carefully consider any responses to consultation on this aspect.

Form of the Control

Ofgem's initial view

2.17. The existing review operates by comparing the expected costs and revenues for all services, and then adjusting the scale of charges for the regulated services so that the total costs and revenues balance. The C3 prices, as defined by the "price cap"⁹ methodology, set an upper limit on the prices that can be charged by regulated facilities (subject to commercial prices not being greater). These services have been price capped since they became regulated.

2.18. Our open letter asked for views on whether the form should be changed to a revenue cap, while noting our previous preference for the continuance of a price cap.

Respondents' views

2.19. NG LNG argued that a price-cap means that the ability to finance its activities is outside of its control. This is because it cannot influence the volume of services required by its regulated customers. It stated that, because OM bookings are below

⁹ Although denoted as a price cap, this represents a minimum price for the services, as the licence allows NG LNG to charge the greater of the regulated price or the price it has been able to secure for commercial services

forecast levels, shareholders are effectively subsidising the LNG storage business. It believes that site specific revenue allowances would ensure that each facility is adequately funded.

2.20. NGG stated that any decision on the form of control should be based on the principles of whether or not it better facilitates an open and competitive market in the provision of the services in question. It stated that the chosen regulatory mechanism should not undermine the development of a competitive market during any interim arrangements. It should also recognise the value of the specific elements of the OM service provision, and the value of the pre-emption rights that NGG hold. These pre-emption rights are not currently represented as they enable NGG to conduct yearly tenders without needing to procure long term contracts to guarantee availability.

Ofgem's Initial Proposal

2.21. We still consider that a price cap remains the most appropriate form of control for these facilities. Historically, NG LNG has benefitted from strong commercial and regulatory revenues, such that these facilities have provided above average returns. Now that they are in decline, NG LNG has proposed moving to a revenue allowance. Such an approach is inconsistent with previous treatment, and simply transfers the volume risk from NG LNG to consumers without any compensatory benefits for consumers.

2.22. Therefore, our Initial Proposal is to continue with a price cap approach on the grounds that it is consistent and proportionate, and places the risks with those best placed to manage them.

Duration of the control

Ofgem's initial view

2.23. The existing control was set to last until 2012 (in the event that OM contestability was not established), when it was expected that a new control would be established to coincide with the timing of the next Transmission Price Control Review. The existing TPCR4 is being rolled over until 2013¹⁰. This is principally to allow implementation of the new sustainable network regulation framework (RIIO) established by our RPI-X@20 project. With this in mind, our current position is that any findings from this review of the LNG Price Control should last until 2013, and that a new control should be developed concurrent with RIIO-T1 for implementation in 2013.

¹⁰ 'Transmission Price Control 4 – Rollover (2012/12): Scope decision and consultation', (Ref: 78/10), 30 June 2010. Available at:

<http://www.ofgem.gov.uk/Networks/Trans/PriceControls/TPCR4Roll-over/ConRes/Documents1/TPCR4%20Rollover%20Scope%20Decision.pdf>

2.24. For the avoidance of doubt, this should not be seen to prejudge our view on whether these assets would fall under the remit of the main transmission price control. It should also be noted that any new control in 2013 would be expected to be based on the principles of the RPI-X@20 project outcomes¹¹.

Respondents' views

2.25. NG LNG supported the timescale and duration of the control, and agreed that there are clear benefits in developing any further review in 2013 concurrent with the next Transmission and Gas Distribution price controls (RIIO-T1 and RIIO-GD1). This would allow incentives to be applied across NG LNGs, NGG and SGN.

2.26. SGN was concerned that the timescales of the control would mean that wider issues would not be considered until the next Transmission Price Control Review. They believe that 2013 would be the appropriate point to consider all issues and cost implications.

Ofgem's Initial Proposal

2.27. We acknowledge that there are significant issues surrounding the long-term funding of these sites, which require detailed consideration. We believe that the most appropriate means to consider these issues is concurrent with RIIO-T1 and RIIO-GD1. Our Initial Proposal remains to set a control until 2013.

2.28. By implication, given the scale and proposed duration of the price control and the timing of decisions, we do not propose to employ RIIO¹² principles in developing our Initial or Final Proposals.

¹¹ 'Regulating energy networks for the future: RPI-X@20 Recommendations', (Ref: 91/10), 26 July 2010. Available at:

<http://www.ofgem.gov.uk/Networks/rpix20/ConsultDocs/Documents1/RPI-X@Recommendations.pdf>

¹² The scope of the control is limited to funding for the sites up to 2013. RIIO is being rolled out as part of RIIO-T1/GD1 for the price control period from 1 April 2013.

3. Costs and Revenues

Chapter Summary

This details the cost and revenue information submitted by NG LNG and shows how this has been used to formulate the Authority's Initial Proposals.

Question box

Question 1: Do you agree with our Proposals on the differing treatment of depreciation and return between historical and future capex?
 Question 2: Is it appropriate that NGG and SGN should be more exposed to the capex costs associated with provision of regulated services at Glenmavis?
 Question 3: Do you think it is appropriate to include commercial revenue foregone in the consideration of price caps?

Introduction

3.1. Ofgem has relied on data provided by NG LNG to develop these Initial Proposals. This data has covered both historical and forecast costs and revenues. We have taken a view on the appropriateness of elements of NG LNG's cost submissions, and used previous data submissions to assess the constancy of operating costs and capital expenditure (opex and capex) levels and plans.

3.2. We consider that our assessment of NG LNG's cost submissions is robust and we have developed a fair set of Initial Proposals. For Final Proposals we will carefully consider responses to this consultation, any further evidence provided by NG LNG and wider respondents.

Operating costs (Opex)

3.3. NG LNG submitted controllable and non-controllable operating cost data for each of their three sites, for the period 2006/07 to 2012/13. In addition, there are certain central costs which are allocated across all of the sites which are reported separately. These are summarised in the table below.

Table 3.1: Summary of operating costs submission

£m nominal prices		2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13
Total Site	Controllable	26.3	20.4	23.6	17.0	14.8	16.3	15.3
Costs	Non controllable	14.2	8.3	8.6	5.1	7.6	9.0	10.9
Central	Controllable	15.1	7.4	0.2	5.0	5.2	6.0	5.9
Costs	Non controllable	(5.8)	0.0	0.0	0.0	(0.1)	0.0	0.0

3.4. Our review of the opex levels indicate that they have been reasonably constant (in real terms) over the period when accounting for the closure of Dynevor Arms, and are forecast to remain so until 2013 (when Partington is expected to close). We note that during the previous price control review, our cost consultant (TPA Solutions) indicated that the operation of these facilities was generally efficient and that there was limited opportunity for cost reduction. Although we have queried the inclusion of some costs, we propose allowing the majority (c. 90 per cent) of the submission in setting the C3 levels. The majority of excluded items related to projects for which we received insufficient information to justify the proposed expenditure.

3.5. However, we have serious concerns as to the inclusion of some central cost elements. For example, NG LNG has been allocated central costs from the initiation of central engineering and IT systems across the NG group. Whereas this might be appropriate if the LNG facilities have a long expected life, it can hardly be considered efficient to allocate significant portions of such costs to units that are being run down with a view to closure (as in Partington's case). Therefore, we have excluded about 24 per cent of NG LNG's central costs submissions to reflect these general views.

Capital Expenditure (Capex)

3.6. NG LNG submitted capex plans of a very different nature for each of the facilities; this was to reflect their differing statuses and life expectancies.

- While Avonmouth is in good condition, the future plans suggested that significant investment will be required over the next few years if it is to continue to provide commercial and regulated services.
- Glenmavis has specific problems with the existing tanks which restrict its deliverability rates. It has stopped providing commercial services and has submitted a range of capex options relating to varying capabilities of regulated service provision up until 2015.
- Partington is being run down with a view to being decommissioned in 2013. Future spend primarily relates to the costs of isolating existing equipment from the operational units for safety reasons.

3.7. The following table gives a high level summary of the historical and projected capex on a site specific basis.

Table 3.2: Summary of capital expenditure submission

£m nominal prices	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13
Avonmouth	5.9	3.6	1.0	0.7	2.4	6.0	5.9
Dynevor Arms	0.5	0.6	0.8	(0.1)	-	-	-
Glenmavis	5.6	2.7	1.6	0.8	1.7	7.7	7.4
Partington	5.0	3.1	1.6	1.3	1.9	1.0	0.1
Centrally Managed	4.4	1.3	0.1	0.4	1.3	0.9	0.2
Total	21.5	11.2	5.2	3.2	7.3	15.6	13.7

3.8. A significant proportion of the projected capex was attributed to improved safety and legislative requirements. For example, the main costs for Avonmouth centred on the relocation of the control centre and the renewal of the associated control systems. NG LNG contend that the Buncefield enquiry has made numerous recommendations, such as increased gas monitoring on site and automated gas tank level monitoring (overflow trips), which were not foreseen at the last control. These safety and legislative requirements have to be implemented, even at the Partington site.

3.9. We have had discussions with the HSE regarding these claims. While it could not comment on the specifics of each item, it did confirm that these sites are under intense scrutiny and pose significant societal risks. On that basis, we have adopted a conservative approach when deciding on whether to exclude such capex from the cost base. We plan to subject these items to further challenge before the Final Proposals.

3.10. The submission for Glenmavis included a matrix of capex options and associated output levels for the SIU and OM services. We have not allowed capex for the full reinstatement of these services, as it seemed to us that an independent business faced with the same decision would not make this level of investment. As the service obligations lie with SGN and NGG, we consider that they should be more directly exposed to the costs of meeting these obligations.

3.11. We have allowed depreciation and return on the historical proportion of the asset base that is in line with the historical ratio of regulated:commercial volume output, by site. This is consistent with our treatment of these costs during the previous control.

3.12. Going forward, we need to ensure that NG LNG has the appropriate incentive to spend on efficient capex as necessary. Given the rapid change in the regulated:commercial ratio at Glenmavis and Partington, we believe that maintaining the historical ratio could compromise safe and efficient future investment at these sites in particular. Therefore, we propose to allow depreciation and return on asset base increases in line with the projected ratio of regulated:commercial volume output, ie all deemed efficient capex in the case of Glenmavis and Partington, 27 per cent of Avonmouth capex.

3.13. We have not included direct allowances for isolation costs at Partington. We see this as another means of bringing forward decommissioning costs and so do not consider it appropriate for customers to bear. However, we will be engaging with NG LNG with a view to incentivising additional costs incurred in decommissioning this facility in a way that furthers our sustainable development objective.

Revenue forecast

3.14. NG LNG provided site specific forecasts of revenue streams up to 2013. This is largely based on the level of OM requirement being relatively constant and Avonmouth commercial services continuing at current levels. There are no

commercial revenues from Glenmavis and Partington after 2010. The revenue information is provided in aggregate form in the table below.

Table 3.3: Summary of revenues

£m nominal prices		2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13
Totals	Operating Margins	12.0	16.0	10.0	8.2	6.2	8.6	8.9
	SIU	2.0	3.2	3.4	3.3	3.4	3.8	3.7
	Glenmavis TO RAV	0.0	1.0	1.1	1.1	1.1	1.1	1.1
	Shipper	67.7	25.7	15.5	10.7	3.7	5.7	5.0
	Constrained LNG	3.1	1.6	1.8	2.1	0.2	0.0	0.0
	Total C3	14.0	19.2	13.4	11.5	9.6	12.4	12.6
	Total	84.8	47.6	31.8	25.4	14.6	19.3	18.7

3.15. We have considered the data in conjunction with NGG's estimates of future OM requirement, and believe that NG LNG's estimates are reasonable.

3.16. In considering the commercial revenue streams, we note that NG LNG withdrew volume from the market because of commercial issues, rather than there being a fall in market demand. We feel that this has resulted in Glenmavis and Partington losing commercial revenues which could have been used to offset costs. Accordingly, we have added the net of associated costs and revenues based on commercial revenue forecasts from the 2007 submission, to reflect this revenue foregone.

4. Price Control Calculations

Chapter Summary

This sets out the Authority's Initial Proposals for the LNG storage price control.

4.1. The previous Chapters have set out our views on the policy issues arising from our open letter. They have also set out the data submitted by NG LNG in response to our information request. This Chapter sets out our proposed format for the Initial Proposals and explains the underlying calculations.

4.2. We are also presenting an alternative outcome, based around NG LNG's data submission. This is to demonstrate the sensitivities around the regulated prices and to allow respondents to assess how changes in the underlying assumptions affect prices.

Calculation Principles and Underlying Assumptions

4.3. The basic principle of the price control calculation is that forecast revenue should equal forecast costs for the period under consideration. NGG has provided revenue and cost forecasts for each year until 2012/13. These forecasts are based around anticipated closure dates of 2013 for Partington and 2015 for Glenmavis (in its current form), with ongoing provision from Avonmouth.

4.4. The net present values (NPVs) of the forecast revenue and cost streams for the years in question (2010/11-2012/13) are compared and any mismatch recouped from (or returned to) customers. This is done by calculating the scaling of regulated service revenues (from 2011/12 and 2012/13¹³) necessary to ensure the NPVs of forecast costs and total revenues are equal. This scaling is in turn applied to the existing C3 prices to adjust their level appropriately.

4.5. As discussed in the previous chapters, we are proposing to continue with a price cap for C3 prices.

4.6. The three sites under consideration have differing characteristics that merit individual consideration. In contrast to the previous control, we have carried out this analysis on a site-by-site basis. For each site, we have analysed the site specific costs and revenues, together with a share of central costs, to give the appropriate C3 price change for each site. This is partly to ensure that any changes to C3 prices

¹³ In Chapter Two we set out that the cost recovery period should include the current year. Since the sites are forecasting a loss for this year, a three year shortfall in revenue will need to be recovered within two years. We would expect the proposed increases to be reversed in the following control to reflect a more evenly matched cost recovery period.

are more reflective of the actual costs at each site. In addition, it will send a locational signal to prospective providers of OM, giving them more information on which to base their bids in the OM tender process.

4.7. We have proposed that the review will be set until the end of 2012/13, in order to coincide with the start of RIIO-T1 and RIIO-GD1. As such, we have performed the analysis over a three year period (2010/11 to 2012/13), with price changes to apply for 2011/12 and 2012/13 as we are already part way through 2010/11.

4.8. All prices used have been adjusted to 2010/11 real prices, using an inflation assumption of 3%.

Cost data and revenue forecasts

Opex

4.9. We have used NG LNG's data submission as the basis for our assessment of operating costs. The controllable opex has been assessed as discussed in the previous chapter, to arrive at the allowances for each site.

4.10. We have also included in our analysis an allowance for central costs. These costs have been shared equally between the three sites, to ensure the C3 price for each site captures the same proportion of central costs.

4.11. As they represent a cost over which NG LNG has no control, we have included the business rates for each site as a pass through item.

Capex

4.12. As detailed in the previous chapter, we have taken a view on the forecast capex as provided by NG LNG. We have only included the projects necessary for the continuance of the regulated services, as we do not believe that it is appropriate for consumers to fund the entire capex programme. We have provided an allowance for the full cost of depreciation and return on this capex.

4.13. In addition to the forecast capex, consistent with the previous control, we have made provision for depreciation and return on a portion of the opening Regulatory Asset Base (RAB). In the previous control, we allowed for depreciation and return on one-third of the total RAB, as this was the historical proportion of total volume bookings used for regulated services across all sites. We have maintained this approach, but have calculated the split of the RAB on a site-by-site basis, using the historical volume bookings for each site from 2006/7-2009/10. This has resulted in providing an allowance for depreciation and return on 27% of the historical Avonmouth RAB, 53% of Glenmavis and 26% of Partington.

4.14. In the previous control's Final Proposals, the assets were depreciated on a straight line basis over 45 years. Given that the sites will be closing in the relatively near future, we have taken the view that NG LNG should be remunerated for their original and subsequent investments over the remaining design life of the original assets. This has resulted in depreciation periods of 5 years at Glenmavis and 15 years at Avonmouth, based on closure dates of 2015 and 2025. Concerning Partington, we are proposing to depreciate the assets over a 6 year period, in line with the design life of the site¹⁴. This is to be compared to the closure date of 2013, which has been brought forward by NG LNG in advance of the anticipated design life.

4.15. To allow for the time lag between the investment and its subsequent remuneration through the depreciation allowance, NG LNG receives a return allowance of the cost of capital times the average RAB. In this calculation, the cost of capital used is the pre-tax rate of 6.25%, as used in the previous C3 price control and TPCR4. This is greater than the cost of capital used in DPCR5, but we consider this is justified given that the LNG business faces more risky and volatile revenues than the typical network monopoly. The choice of this rate should not be taken as a signal of Ofgem's intentions regarding the cost of capital for the TPCR4 roll-over, RIIO-T1 or RIIO-GD1.

Revenue forecasts

4.16. We have used NG LNG's forecast of revenue in our analysis for the three sites. NG LNG has stopped offering commercial services at Glenmavis and Partington, and taken a commercial decision to forgo revenues. As such, we have included provision for commercial revenue forgone. This has been calculated by comparing forecasts from the current submission with the previous submission (from 2007). The forgone margin is the difference in forecast commercial revenues, net of any increase in forecast commodity costs¹⁵. This forgone revenue has been added to the revenue forecast for the purposes of calculating the necessary change in C3 prices.

Price control Initial Proposal

4.17. In summary, our Initial Proposals have the following key features:

- A price cap on the provision of regulated services (as against a revenue allowance)
- A two-year duration for the control, to take it to 2013 (where it can be reconsidered in parallel with RIIO-T1 and RIIO-GD1)
- Location-specific adjustments to the price caps of the regulated services (as against an across-the-board average increase), in order to send appropriate

¹⁴ Partington was commissioned in 1972 (a year after Glenmavis in 1971), and so we are assuming an end of design life one year later than that of Glenmavis.

¹⁵ Commodity costs represent the main variable cost to the LNG sites, as commercial services require more liquefaction and regasification, and hence demand additional electricity and gas usage.

signals for parties that might wish to participate in NGG's Operating Margins (OM) tender process

- Remuneration for efficient forward looking costs and depreciation and return on a proportion of the historical capital expenditure
- No provision for decommissioning costs, in line with our stance in the previous control

4.18. Our principal objective is to protect the interests of existing and future consumers in relation to gas conveyed through pipes. We also have a series of duties that we must have regard to in performing our functions in a manner calculated to further the principal objective. One such duty is to have regard to the need to contribute to the achievement of sustainable development. In light of this, we are minded to introduce an environmental incentive on NG LNG to challenge it to decommission its sites in a sustainable manner. We believe that this would be in keeping with our principal objective and consistent with our wider statutory duty in respect of sustainable development. We have given an initial indication of how this might be achieved in paragraph 2.15 previously. However, the detail of how this could be achieved will need to be worked out between now and the Final Proposals if it is to take effect.

4.19. When these factors are taken into account, Ofgem is proposing that £79m of costs should be included when setting the C3 price caps for the three year period, whereas NG LNG's proposed figure was £191m (or £156m if Dynevor is excluded from consideration). The breakdown is shown in the table below.

Table 4.1: Overview of cost components

£m (2010/11 prices)		NG LNG Submission	Ofgem Initial Proposals
NPV Total Allowances	Capex	32.0	9.8
	Opex	41.3	37.2
	Central Costs	15.1	11.5
	Return on RAV	14.9	7.8
	Depreciation	119.8 (84.4 excluding Dynevor)	22.4

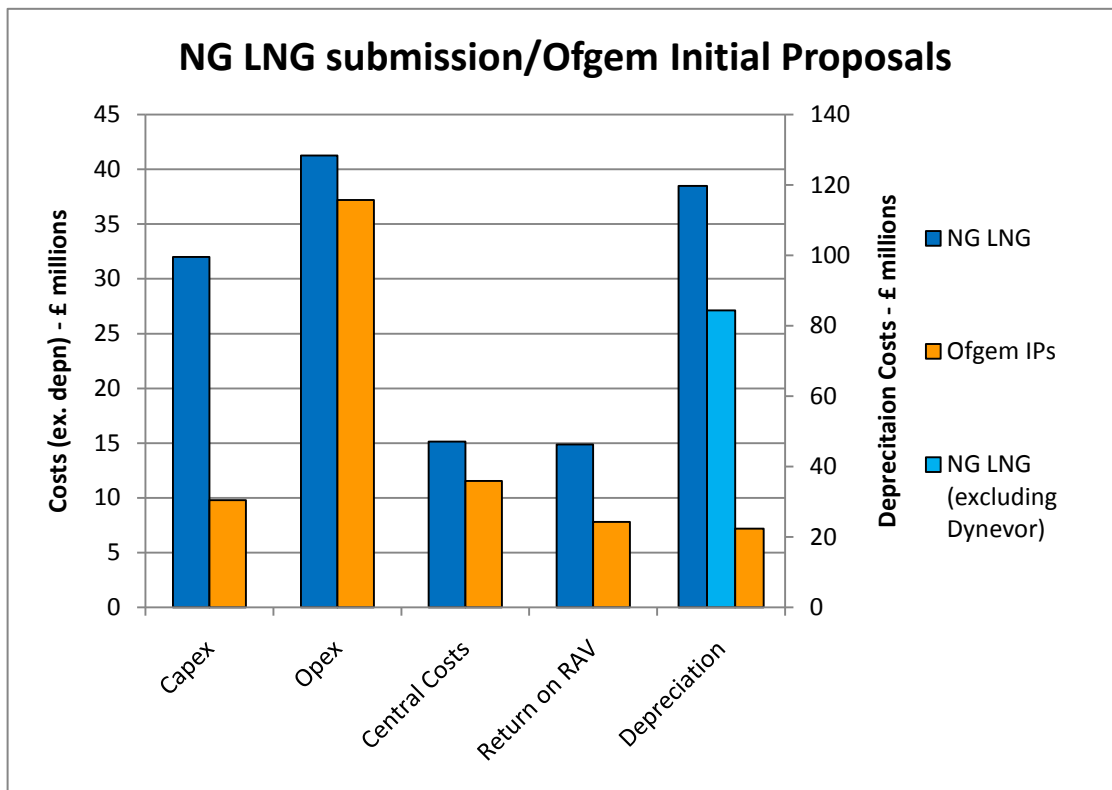
4.20. The calculations based on the above assumptions are laid out on the following pages. The net effect on the current C3 prices is a proposed 205% increase at Avonmouth, 85% increase at Glenmavis and 250% increase at Partington. These are contrasted with NG LNG's proposals in the table below.

Table 4.2: Comparison of percentage increases - NG LNG and Ofgem

		NG LNG Submission	Ofgem Initial Proposals
C3 Price Increase (%)	Avonmouth	512%	205%
	Glenmavis	320%	85%
	Partington	2001%	250%

4.21. The differences between Ofgem's Initial Proposals and NG LNG's submissions are illustrated below.

Figure 4.1: Graphical comparison of Ofgem and NG LNG proposals



4.22. The following pages itemise the detail of each of Ofgem's Initial Proposals, by site.

Data source	Ofgem View		
Site	Avonmouth		
Years included	From 2010/11		
Allowance for Dynevor Arms depreciation?	No		
Opening RAV allowance	17.1 (27% of total)		
Cost of capital (pre-tax)	6.25%		
Remaining asset life (years)	15		
Includes forgone commercial revenue?	Yes		
Year ending 30 April £m 10/11 real	2011	2012	2013
Capex forecast	0.4	0.9	1.0
Cost breakdown			
Opex	4.4	8.0	7.0
Central costs	1.4	1.4	1.3
Rates	0.7	0.7	0.7
Depreciation	1.1	1.2	1.2
Return on RAV	1.0	1.0	1.0
Total	<u>8.7</u>	<u>12.3</u>	<u>11.2</u>
Net Present Value of total	8.4	11.2	9.6
Scenario NPV			29.2
Revenue Forecast			
NGG LNG forecast + forgone revenue	5.5	8.2	7.3
NPV of revenue	5.3	7.5	6.3
Scenario NPV			19.0
Revenue less Cost			
PV of Revenue less costs			(10.2)
NGG LNG income from regulated services			
NGG LNG regulated services income		2.9	2.8
NPV of NGG LNG regulated services income		2.6	2.4
Scenario NPV			5.0
Percentage change to C3 prices req'd			205%

Data source	Ofgem View		
Site	Glenmavis		
Years included	From 2010/11		
Allowance for Dynevor Arms depreciation?	No		
Opening RAV allowance	19.5 (53% of total)		
Cost of capital (pre-tax)	6.25%		
Remaining asset life (years)	5		
Includes forgone commercial revenue?	Yes		
Year ending 30 April £m 10/11 real	2011	2012	2013
Capex forecast	0.7	4.1	3.3
Cost breakdown			
Opex	5.5	4.7	4.5
Central costs	1.4	1.4	1.3
Rates	0.4	0.4	0.4
Depreciation	3.9	4.0	4.9
Return on RAV	1.1	1.0	1.0
Total	12.3	11.6	12.1
Net Present Value of total	12.0	10.6	10.4
Scenario NPV			32.9
Revenue Forecast			
NGG LNG forecast + forgone revenue	7.6	8.7	8.5
NPV of revenue	7.4	8.0	7.3
Scenario NPV			22.7
Revenue less Cost			
PV of Revenue less costs			(10.2)
NGG LNG income from regulated services			
NGG LNG regulated services income		6.9	6.7
NPV of NGG LNG regulated services income		6.3	5.8
Scenario NPV			12.0
Percentage change to C3 prices req'd			85%

Data source	Ofgem View		
Site	Partington		
Years included	From 2010/11		
Allowance for Dynevor Arms depreciation?	No		
Opening RAV allowance	16.1 (26% of total)		
Cost of capital (pre-tax)	6.25%		
Remaining asset life (years)	6		
Includes forgone commercial revenue?	Yes		
Year ending 30 April £m 10/11 real	2011	2012	2013
Capex forecast	0.4	0.2	0.0
Cost breakdown			
Opex	3.8	1.4	1.3
Central costs	1.4	1.4	1.3
Rates	0.5	0.5	0.5
Depreciation	2.7	2.8	2.8
Return on RAV	0.9	0.8	0.6
Total	9.4	6.8	6.6
Net Present Value of total	9.1	6.2	5.6
Scenario NPV			20.9
Revenue Forecast			
NGG LNG forecast + forgone revenue	3.2	4.1	4.1
NPV of revenue	3.1	3.8	3.5
Scenario NPV			10.4
Revenue less Cost			
PV of Revenue less costs			(10.5)
NGG LNG income from regulated services			
NGG LNG regulated services income		2.3	2.4
NPV of NGG LNG regulated services income		2.1	2.1
Scenario NPV			4.2
Percentage change to C3 prices req'd			250%

Alternative Scenarios

4.23. To allow interested parties to gauge the effects of changing the inputs to the price control calculation, we have included an alternative scenario. This is based around accepting NG LNG's full cost submission. This includes an allowance for depreciation and return on 100% of the RAB at Glenmavis and Partington, depreciating Partington assets over 3 years (based on a 2013 closure) and making allowance for depreciation of the remaining residual RAB from the Dynevor Arms site. This remaining residual RAB from Dynevor Arms is included as a one-off depreciation cost in 2011/12, split equally between the three sites. This would result in increases of 512%, 320% and 2001% at Avonmouth, Glenmavis and Partington respectively. These calculations are laid out on the following pages.

Data source	NGG LNG		
Site	Avonmouth		
Years included	From 2010/11		
Allowance for Dynevor Arms depreciation?	Yes		
Opening RAV allowance	15.8 (25% of total)		
Cost of capital (pre-tax)	6.25%		
Remaining asset life (years)	15		
Includes forgone commercial revenue?	No		
Year ending 30 April £m 10/11 real	2011	2012	2013
Capex forecast	2.8	6.2	5.6
Cost breakdown			
Opex	4.8	8.6	7.6
Central costs	1.7	1.9	1.8
Rates	0.7	0.7	0.7
Depreciation	1.1	14.0	1.7
Return on RAV	1.0	1.3	1.5
Total	9.3	26.4	13.2
Net Present Value of total	9.0	24.1	11.4
Scenario NPV			44.5
Revenue Forecast			
NGG LNG forecast	5.5	8.2	7.3
NPV of revenue	5.3	7.5	6.3
Scenario NPV			19.0
Revenue less Cost			
PV of Revenue less costs			(25.5)
NGG LNG income from regulated services			
NGG LNG regulated services income		2.9	2.8
NPV of NGG LNG regulated services income		2.6	2.4
Scenario NPV			5.0
Percentage change to C3 prices req'd			512%

Data source	NGG LNG		
Site	Glenmavis		
Years included	From 2010/11		
Allowance for Dynevor Arms depreciation?	Yes		
Opening RAV allowance	36.9 (100% of total)		
Cost of capital (pre-tax)	6.25%		
Remaining asset life (years)	5		
Includes forgone commercial revenue?	No		
Year ending 30 April £m 10/11 real	2011	2012	2013
Capex forecast	2.1	7.8	7.1
Cost breakdown			
Opex	5.9	5.0	4.8
Central costs	1.7	1.9	1.8
Rates	0.4	0.4	0.4
Depreciation	7.4	20.5	9.4
Return on RAV	2.1	2.0	1.9
Total	17.5	29.8	18.2
Net Present Value of total	17.0	27.2	15.7
Scenario NPV			59.9
Revenue Forecast			
NGG LNG forecast	7.4	8.2	7.9
NPV of revenue	7.1	7.4	6.8
Scenario NPV			21.4
Revenue less Cost			
PV of Revenue less costs			(38.5)
NGG LNG income from regulated services			
NGG LNG regulated services income		6.9	6.7
NPV of NGG LNG regulated services income		6.3	5.8
Scenario NPV			12.0
Percentage change to C3 prices req'd			320%

Data source	NGG LNG		
Site	Partington		
Years included	From 2010/11		
Allowance for Dynevor Arms depreciation?	Yes		
Opening RAV allowance	62.1 (100% of total)		
Cost of capital (pre-tax)	6.25%		
Remaining asset life (years)	3		
Includes forgone commercial revenue?	No		
Year ending 30 April £m 10/11 real	2011	2012	2013
Capex forecast	2.3	1.2	0.2
Cost breakdown			
Opex	4.1	2.2	2.1
Central costs	1.7	1.9	1.8
Rates	0.5	0.5	0.5
Depreciation	20.7	34.2	21.9
Return on RAV	3.3	2.1	0.8
Total	<u>30.3</u>	<u>40.9</u>	<u>27.1</u>
Net Present Value of total	29.4	37.4	23.3
Scenario NPV			90.1
Revenue Forecast			
NGG LNG forecast	1.8	2.4	2.4
NPV of revenue	1.7	2.2	2.1
Scenario NPV			5.9
Revenue less Cost			
PV of Revenue less costs			(84.2)
NGG LNG income from regulated services			
NGG LNG regulated services income		2.3	2.4
NPV of NGG LNG regulated services income		2.1	2.1
Scenario NPV			4.2
Percentage change to C3 prices req'd			2001%

5. Next steps

Chapter summary

Outlines the next steps and the timeframe for the remainder of the price control.

5.1. This document is the second of a planned series of three documents on the LNG Storage price control. The next planned document is the Final Proposals, which are expected to be issued in the middle of January 2011. This document will also contain the formal Section 23 Notice consultation to amend the gas transporter licence.

5.2. Ofgem will be engaging with NG LNG between now and the Final Proposals to discuss any issues arising out of these Initial Proposals. Ofgem would also be pleased to consider representations from any other interested parties during this time period.

5.3. Ofgem is asking for responses to this consultation by Monday 20 December 2010. Given the tightness of the timelines, early responses would be appreciated in order to allow the maximum time for consideration of any issues raised.

Appendices

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Appendix 1 - Consultation Response and Questions

1.1. Ofgem would like to hear the views of interested parties in relation to any of the issues set out in this document.

1.2. We would especially welcome responses to the specific questions which we have set out at the beginning of each chapter heading and which are replicated below.

1.3. Responses should be received by 20 December 2010 and should be sent to:

- Paul O'Donovan
- Gas Transmission Policy
- Ofgem
- 9 Millbank
- London SW1P 3GE
- 020 7901 7414
- gas.transmissionresponse@ofgem.gov.uk

1.4. Unless marked confidential, all responses will be published by placing them in Ofgem's library and on its website www.ofgem.gov.uk. Respondents may request that their response is kept confidential. Ofgem shall respect this request, subject to any obligations to disclose information, for example, under the Freedom of Information Act 2000 or the Environmental Information Regulations 2004.

1.5. Respondents who wish to have their responses remain confidential should clearly mark the document/s to that effect and include the reasons for confidentiality. It would be helpful if responses could be submitted both electronically and in writing. Respondents are asked to put any confidential material in the appendices to their responses.

1.6. Next steps: Having considered the responses to this consultation, Ofgem intends to set out its Final Proposals by the middle of January 2011. Any questions on this document should, in the first instance, be directed to:

- Thomas Farmer
- Gas Transmission Policy
- Ofgem
- 9 Millbank
- London SW1P 3GE
- 020 7901 1862
- gas.transmissionresponse@ofgem.gov.uk

CHAPTER: Two

Question1: Do you agree with our Initial Proposals on the scope, form and duration of the control?

CHAPTER: Three

Question1: Do you agree with our Proposals on the differing treatment of depreciation and return between historic and future capex?

Question2: Is it appropriate that NGG and SGN should be more exposed to the capex costs associated with provision of regulated services at Glenmavis?

Question3: Do you think it is appropriate to include commercial revenue foregone in the consideration of price caps?

Appendix 2 - The Authority's Powers and Duties

1.1. Ofgem is the Office of Gas and Electricity Markets which supports the Gas and Electricity Markets Authority ("the Authority"), the regulator of the gas and electricity industries in Great Britain. This appendix summarises the primary powers and duties of the Authority. It is not comprehensive and is not a substitute to reference to the relevant legal instruments (including, but not limited to, those referred to below).

1.2. The Authority's powers and duties are largely provided for in statute (such as the Gas Act 1986, the Electricity Act 1989, the Utilities Act 2000, the Competition Act 1998, the Enterprise Act 2002 and the Energy Acts of 2004, 2008 and 2010) as well as arising from directly effective European Community legislation.

1.3. References to the Gas Act and the Electricity Act in this appendix are to Part 1 of those Acts.¹⁶ Duties and functions relating to gas are set out in the Gas Act and those relating to electricity are set out in the Electricity Act. This appendix must be read accordingly.¹⁷

1.4. The Authority's principal objective is to protect the interests of existing and future consumers in relation to gas conveyed through pipes and electricity conveyed by distribution or transmission systems. The interests of such consumers are their interests taken as a whole, including their interests in the reduction of greenhouse gases and in the security of the supply of gas and electricity to them.

1.5. The Authority is generally required to carry out its functions in the manner it considers is best calculated to further the principal objective, wherever appropriate by promoting effective competition between persons engaged in, or commercial activities connected with,

- the shipping, transportation or supply of gas conveyed through pipes;
- the generation, transmission, distribution or supply of electricity;
- the provision or use of electricity interconnectors.

1.6. Before deciding to carry out its functions in a particular manner with a view to promoting competition, the Authority will have to consider the extent to which the interests of consumers would be protected by that manner of carrying out those functions and whether there is any other manner (whether or not it would promote competition) in which the Authority could carry out those functions which would better protect those interests.

¹⁶ Entitled "Gas Supply" and "Electricity Supply" respectively.

¹⁷ However, in exercising a function under the Electricity Act the Authority may have regard to the interests of consumers in relation to gas conveyed through pipes and vice versa in the case of it exercising a function under the Gas Act.

1.7. In performing these duties, the Authority must have regard to:

- the need to secure that, so far as it is economical to meet them, all reasonable demands in Great Britain for gas conveyed through pipes are met;
- the need to secure that all reasonable demands for electricity are met;
- the need to secure that licence holders are able to finance the activities which are the subject of obligations on them¹⁸; and
- the need to contribute to the achievement of sustainable development.

1.8. In performing these duties, the Authority must have regard to the interests of individuals who are disabled or chronically sick, of pensionable age, with low incomes, or residing in rural areas.¹⁹

1.9. Subject to the above, the Authority is required to carry out the functions referred to in the manner which it considers is best calculated to:

- promote efficiency and economy on the part of those licensed²⁰ under the relevant Act and the efficient use of gas conveyed through pipes and electricity conveyed by distribution systems or transmission systems; protect the public from dangers arising from the conveyance of gas through pipes or the use of gas conveyed through pipes and from the generation, transmission, distribution or supply of electricity; and secure a diverse and viable long-term energy supply, and shall, in carrying out those functions, have regard to the effect on the environment.

1.10. In carrying out these functions the Authority must also have regard to:

- the principles under which regulatory activities should be transparent, accountable, proportionate, consistent and targeted only at cases in which action is needed and any other principles that appear to it to represent the best regulatory practice; and
- certain statutory guidance on social and environmental matters issued by the Secretary of State.

1.11. The Authority may, in carrying out a function under the Gas Act and the Electricity Act, have regard to any interests of consumers in relation to communications services and electronic communications apparatus or to water or sewerage services (within the meaning of the Water Industry Act 1991), which are affected by the carrying out of that function.

¹⁸ Under the Gas Act and the Utilities Act, in the case of Gas Act functions, or the Electricity Act, the Utilities Act and certain parts of the Energy Acts in the case of Electricity Act functions.

¹⁹ The Authority may have regard to other descriptions of consumers.

²⁰ Or persons authorised by exemptions to carry on any activity.

1.12. The Authority has powers under the Competition Act to investigate suspected anti-competitive activity and take action for breaches of the prohibitions in the legislation in respect of the gas and electricity sectors in Great Britain and is a designated National Competition Authority under the EC Modernisation Regulation²¹ and therefore part of the European Competition Network. The Authority also has concurrent powers with the Office of Fair Trading in respect of market investigation references to the Competition Commission.

²¹ Council Regulation (EC) 1/2003.

Appendix 3 - Glossary

C

Capital Expenditure (Capex)

Expenditure on investment in long-lived assets, such as LNG storage tanks and process plant.

L

Liquefied Natural Gas (LNG)

LNG consists mainly of methane gas liquefied at around -162°C. Cooling and liquefying the gas reduces its volume by 600 times such that a tonne of LNG corresponds to about 1,400 cubic metres of methane in its gaseous state. LNG may be stored or transported by special tanker.

N

National Grid Gas (NGG)

The licensed gas transporter responsible for the gas transmission system, and four of the regional gas distribution companies.

National Grid Liquefied Natural Gas (NG LNG)

A trading division of NGG, which owns and operates the LNG Storage facilities which are the subject of this review.

National Transmission System (NTS)

The high pressure gas transmission system in Great Britain.

O

Operating Expenditure (Opex)

The costs of the day to day operation of the sites such as staff costs, repairs and maintenance expenditures, and overheads.

Operating Margins (OM)

In relation to gas, OM is gas in storage which is reserved by the NTS to ensure that the supply of gas is maintained in the event of a network emergency.

R[Regulated Asset Base \(RAB\)](#)

The value ascribed by Ofgem to the capital employed in the licensee's regulated business.

S[Scotia Gas Networks \(SGN\)](#)

The Gas Transmission licence holder for the Southern and Scotland Gas Distribution Networks (GDNs).

[Scottish Independent Undertakings \(SIUs\)](#)

Five remote towns in Scotland (Stornoway, Wick, Thurso, Oban and Campbeltown), comprising around 6,500 customers, that receive regasified LNG via road tankers loaded at the Glenmavis LNG facility.

T[Transmission Price Control review 4 \(2007-12\) \(TPCR4\)](#)

The TPCR established the price controls for the transmission licensees which took effect in April 2007 for a 5 year period. The review applies to the three electricity transmission licensees, National Grid Electricity Transmission (NGET), Scottish Power Transmission Ltd (SPTL), Scottish Hydro Electric Transmission Ltd (SHETL) and to the licensed gas transporter responsible for the gas transmission system, NGG.

[Transmission System Operator \(TSO\)](#)

The system operator has responsibility to construct, maintain and operate the NTS and associated equipment in an economic, efficient and co-ordinated manner. In its role as SO, NGG NTS is responsible for ensuring the day-to-day operation of the transmission system.

Appendix 4 - Feedback Questionnaire

1.1. Ofgem considers that consultation is at the heart of good policy development. We are keen to consider any comments or complaints about the manner in which this consultation has been conducted. In any case we would be keen to get your answers to the following questions:

1. Do you have any comments about the overall process, which was adopted for this consultation?
2. Do you have any comments about the overall tone and content of the report?
3. Was the report easy to read and understand, could it have been better written?
4. To what extent did the report's conclusions provide a balanced view?
5. To what extent did the report make reasoned recommendations for improvement?
6. Please add any further comments.

1.2. Please send your comments to:

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