

August 2001

**Dynegy Inc's proposed acquisition
of BG Storage Ltd**

A consultation document

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1. Introduction

Purpose of this document

1.1 This document:

- ◆ gives background details of the gas storage market and the present regulatory framework within which BG Storage Ltd operates;
- ◆ describes the proposed acquisition of BG Storage Ltd (BG Storage) by Dynegy Inc (Dynegy);
- ◆ explains the merger control process for this transaction; and
- ◆ requests comments on any regulatory issues arising from the proposed transaction.

1.2 Ofgem will make recommendations to the Director General of Fair Trading (DGFT) in relation to the proposed merger. In order to allow comments to be considered Ofgem needs to receive these not later than 8 August 2001.

2. The storage market: recent developments

The physical storage market

Background

- 2.1 Gas storage facilities allow gas produced to be stored physically for use in later periods. As gas demand is affected by temperature, demand is usually significantly higher in the winter than in the summer months. The availability of seasonal storage options potentially allows peak demands for gas to be met in a less costly way. Storage also allows gas producers to smooth production over the year by injecting gas into storage facilities when demand is low and withdrawing it in periods of high demand.
- 2.2 Storage also provides an effective flexibility tool that allows gas shippers and suppliers to respond to rapid movements in demand and/or prices in the gas and electricity markets, over shorter periods (including within-day). It can also help the System Operator to balance demand and supply within particular locations on the gas transportation network.
- 2.3 Gas storage facilities have a number of key characteristics, chief amongst which are:
 - ◆ the rate at which gas can be injected into a gas storage facility ('injectability');
 - ◆ the rate at which gas can be withdrawn from the facility ('deliverability'); and
 - ◆ space, ie. the total amount of gas that the facility can hold when full.
- 2.4 Among the other characteristics of storage facilities that are likely to be important are: location, lead times for injection and withdrawal, and reliability.
- 2.5 The major sources of physical gas storage in Great Britain (GB) are the Rough and Hornsea facilities, and the five Liquefied Natural Gas (LNG) facilities. Originally, all the facilities were owned and operated by British Gas plc. However, through a process of de-merger and separation (explained below),

Rough and Hornsea are now owned and operated by BG Storage (a ring-fenced subsidiary within the BG Group) and the LNG sites by Transco LNG (a ring-fenced subsidiary within Transco). In addition some new entrants have recently entered the physical gas storage market.

BG Storage

- 2.6 The Rough offshore storage facility is a partially depleted gas field in the Southern North Sea. It is used to store gas three kilometres underground. It is essentially a gas storage reservoir into which gas is injected and withdrawn. The Rough field can store around 30 TWh (which is equal to the quantity of gas needed to supply the market for thirteen days). It has a high deliverability rate of 455 GWh/day.
- 2.7 There are nine man-made salt cavities at the Hornsea storage facility located in East Yorkshire. The usable space is 3.5 TWh and the cavities can deliver gas at the rate of 195 GWh/day.
- 2.8 The Easington onshore terminal processes gas destined for or coming from the Rough field. This facility processes the Rough and third party natural gas streams and delivers into the GB gas transportation network.
- 2.9 Rough and Hornsea account for approximately 86% (33,829 GWh) of storage space and 43% (643 GWh/d) of deliverability capacity in GB. The withdrawal lead times vary from half an hour to twelve hours and injection lead times from two hours to twelve hours.¹
- 2.10 The Rough and Hornsea sites were originally developed for seasonal storage purposes, although they do have relatively short lead times in higher states of readiness, so they can be used to balance supply and demand over shorter periods, including for daily balancing purposes.

¹ For more details see 'Review of the supply of gas storage and related services. The Director General's Initial Proposals', Ofgas, June 1998.

Transco LNG

- 2.11 Transco's LNG facilities were developed as part of the gas transportation system to alleviate the effects of potential transmission constraints. They tend to be used to provide security in the event of very high demands in their local areas.
- 2.12 Transco's LNG sites account for 10% (4062 GWh) of storage space but 55% (812 GWh/d) of deliverability capacity. The withdrawal lead times range from one to eight hours, and injection rates from twelve hours to ten days.²

Independent Storage Operators

- 2.13 The remainder of the current physical storage market is comprised of new entrants. In short, Scottish Power's (SP) new storage site at Hatfield Moor (space capacity of 1260 GWh, deliverability of 54.7 GWh/d), and Aquila's site at Hole House (space capacity of 821 GWh and deliverability of 59 GWh/d).
- 2.14 In addition to these now operational sites, there are two other proposed new independent storage projects. Intergen's facility at Aldborough, with an expected space capacity of 1758-2198 GWh and deliverability of 176-264 GWh/d, has received planning permission. The other planned site is Scottish Power's Humbly Grove facility (space: 1080 GWh, deliverability:36 GWh/d). Ofgem understands that the BG Group is contemplating a further site in Aldborough although there are as yet no details.
- 2.15 A summary of the physical storage market, including existing facilities and proposed new facilities, is set out overleaf.

² Review of the supply of gas storage and related services. The Director General's Initial Proposal, Ofgas June 1998.

Table 2.1 - Summary of existing and planned physical storage facilities

Existing Storage facilities	Owner	Space (GWh)	Deliverability (GWh/d)
Rough	BGS	30,344	455
Hornsea	BGS	3,495	188
<i>Sub-total</i>		<i>33,839</i>	<i>643</i>
Avonmouth LNG	TLNG	827	165
Dynevor Arms LNG	TLNG	276	55
Glenmavis LNG	TLNG	551	110
Isle of Grain LNG	TLNG	1,213	243
Partington LNG	TLNG	1,195	239
<i>Sub-Total</i>		<i>4,062</i>	<i>812</i>
Hatfield Moor	SP	1,260	54.7
Hole House	Aquila	821	29.3
<i>Sub-Total</i>		<i>2,081</i>	<i>84</i>
<i>TOTAL</i>		<i>39,982</i>	<i>1539</i>
Proposed new sites			
Aldborough	Intergen	2,198 (max)	264 (max)
Humbly Grove	SP	1,080	36
<i>Sub-total</i>		<i>2361</i>	<i>300</i>
<i>OVERALL PROJECTED</i>		<i>42,343</i>	<i>1839</i>
<i>TOTAL</i>			

The regulatory framework

UK Regulation

- 2.16 The Rough and Hornsea storage facilities, now owned and operated by the BG group, were originally regulated under British Gas plc's integrated gas suppliers licence, and later its public gas transporters licence issued under the Gas Act 1986 (as amended). In February 1999, on the basis of an agreement with Ofgas to introduce more competition into the market, these facilities were removed from BG's licence and regulated thereafter on the basis of public undertakings (the 'Undertakings') agreed between BG plc and Ofgas and general competition legislation.
- 2.17 The LNG storage facilities, now owned and operated by Transco, are regulated under its gas transporters licence.
- 2.18 The operation and/or ownership of storage facilities by new entrants are not licensable activities under the Gas Act 1986.

EC Regulation

- 2.19 On 10 August 2000, Directive 98/30/EC concerning common rules for the internal market for gas was transposed into UK law by The Gas (Third Party Access and Accounts) Regulations 2000 (the Regulations).
- 2.20 The Regulations gave the Authority³ a statutory duty under Sections 19A and 19C of the Gas Act 1986 (as amended) and Section 17C of the Petroleum Act 1998 to consider applications made by owners of storage facilities for exemption from the requirements of certain provisions in the legislation. In exercising this function the Authority must satisfy itself in relation to specified criteria set out in the legislation.

³ The Gas Act 1986 (the Gas Act), as amended by the Utilities Act 2000, provides for the regulation of the onshore gas arrangements in Great Britain and for the separate licensing of Gas Transporters (GTs), gas shippers and gas suppliers. The Utilities Act 2000 also provides for the transfer of the duties of the Director General of Gas Supply and Director General of Electricity Supply to the Gas and Electricity Markets Authority (the Authority).

2.21 In November 2000, Ofgem published a decision document setting out how it intended to interpret the criteria and the basis on which any requests for exemptions would be granted. BG Storage did not apply for an exemption in respect of Rough and Hornsea. The relevant provisions of the legislation relating to Third Party access therefore apply to the Rough and Hornsea facilities. Transco LNG applied for (and was granted) an exemption in respect of each of its five LNG facilities. Similarly, Scottish Power and Aquila applied for and were granted exemptions for their respective sites.

Regulation of BG Storage Ltd

2.22 As noted above, in February 1999, following an Ofgas investigation "to collect and assess evidence on the existence and use of market power in the provision of storage services", Ofgas and BG plc agreed a series of Undertakings.

2.23 A more detailed description of events leading up to the agreement of the Undertakings is set out in Appendix 1.

2.24 The Undertakings which run for five years and govern the conduct of BG's storage business until 2004/5, and were intended to govern the conduct of BG Storage in the transition to a competitive storage market.

2.25 The overall objectives of the Undertakings were to ensure all BG's storage capacity was offered to the market on non-discriminatory terms and not artificially withheld for technical or economic reasons; and to ensure that should BG choose to purchase some of its capacity on the same basis as other purchasers, it did not obtain an unfair advantage by virtue of being also the operator of the storage facilities.

2.26 The Undertakings included, amongst other things: the auctioning of Rough and Hornsea storage services; the facilitating of a secondary market in storage services; and the effective separation of the storage business from the rest of BG plc's business units. The Undertakings also require the consent of the Authority before the disposal of the storage facilities. A full list of the Undertakings is included in Appendix 2.

- 2.27 The existing capacity auction arrangements are set out in BG plc's Undertakings and provide a transparent basis by which Ofgem can effectively monitor that all capacity is being offered on non-discriminatory terms, without the need for detailed scrutiny and oversight.
- 2.28 The existing arrangements also address potential concerns about hoarding of capacity by providing for a daily interruptible 'use-it-or-lose it' (UIOLI) service in relation to all capacity against which a nomination has not been made.
- 2.29 The Undertakings constrain BG Storage to operate the facilities in a manner consistent with general competition law (including the caveat that any reserve prices are set on an appropriate basis and do not effectively withhold capacity from the market).
- 2.30 In particular, the current Undertakings include a commitment in relation to a robust separation of the storage business from all other commercial activities of the BG Group. This was intended to ensure that other parts of the BG Group could not trade on the basis of what could potentially be market sensitive information regarding other shippers' injections and withdrawals from either facility.
- 2.31 In late 1999, BG plc implemented a new corporate structure. A new listed company called BG Group plc was incorporated and underneath that group there were created two wholly owned subsidiaries: BG Transco plc and BG Energy Holdings. BG Storage became a wholly owned subsidiary of BG Energy Holdings. On 10 December 1999, BG Energy Holdings undertook to be bound by the Undertakings previously given by BG plc with the sole exception of Undertaking 18.⁴ On 23 October 2000, BG Group plc demerged Transco as part of the Lattice Group by way of a stock market flotation. BG Storage's storage facilities (Rough and Hornsea) are therefore under separate ownership from that of the gas transportation network and the LNG storage facilities.

⁴ Undertaking 18 referred to the expediting of discussions with the HSE regarding the removal of the top-up obligation. Such an obligation was more properly concerned with the operation of the transportation network and thus not relevant to BG Energy Holdings Ltd.

Ownership of storage rights

- 2.32 The last three years have seen the auctioning of storage services at both Rough and Hornsea following the reforms agreed between BG plc and Ofgas. Auctions have taken place in March 1999, 2000 and 2001. The auctions required BG Storage to sell half of the bundled capacity rights (consisting of a pre-defined bundle of injectability, space and deliverability rights) in longer term auctions (selling capacity rights through to 2004/5) and the other half through a series of annual auctions of bundled capacity rights for one year. (Any rights not sold in the longer term auctions were rolled up into the one year auctions.)
- 2.33 The table below shows that over half of the capacity at Rough has already been sold to third parties until 2004/5 and that over 65% of Hornsea has been sold. It should be noted that if Dynegy had participated in previous storage auctions and were successful in securing storage capacity rights, this would be reflected in the figures contained in the table below.
- 2.34 Clearly, to gain an accurate assessment of Dynegy's overall capacity holdings at Rough and Hornsea following any possible purchase of BG Storage, the possibility of any such capacity rights must also be considered. It should also be noted that the BG Group would remain the owners of any storage capacity rights they might have secured in the previous capacity auctions at least up until 2004.

Table 2.2 - Proportion of capacity sold

	Rough	Hornsea
1999/00	10.5%	50%
2000/01	12.8%	0%
2001/02	29.9%	15%
Total	53.2%	65%

- 2.35 Under recent market conditions, holders of capacity at Rough and Hornsea appear to have used the facilities to perform different functions: patterns of use would suggest that Rough is predominantly used for seasonal balancing, whilst Hornsea provides an important source of within-day flexibility.

Close substitutes for physical storage

- 2.36 There are relatively close supply and demand substitutes for the services provided by physical storage services. These include beach flexibility, the Bacton interconnector, 'virtual' storage, linepack (ie. gas stored in the pipeline network itself) and interruptible demand contracts.

Forecast Maximum Beach Flows

- 2.37 In the storage review, Ofgas noted that BG Storage accounted for around 28% of the capacity to meet total peak demand for gas in Great Britain in 1997. This was taken to include maximum beach flows plus storage deliverability. Maximum beach flows were forecast to be 4620 GWh for 2000/01 (in Transco's 2000 Base Plan Assumptions), compared with a forecast of 3745 GWh per day for 1997/8 used in the storage review calculations. Taking this increase into account, and taking into account new entrants, BG plc's facilities (now excluding the LNG facilities) account for about 11% of beach flow plus storage deliverability at present.
- 2.38 However, it can be noted that whilst this measure can give us an indication of the potential importance of storage in supplying the NTS, it is the swing potential of other sources of supply that is important when considering substitute means of meeting fluctuations in demand.

The Bacton Interconnector

- 2.39 The Bacton Interconnector is capable of exporting up to 628 GWh per day, or importing up to 271 GWh per day. Despite the magnitude of these capabilities, it is not obviously the case that the Interconnector results in an increase in the capacity to meet peak demands on the NTS. In Transco's 1999 10 year statement, when it estimates the supply/demand balance in relation to the 1 in 20 peak day, it was assumed that the Bacton Interconnector would be exporting 264 GWh/d. The supply data details maximum input flows from beach terminals and storage sites, and includes a maximum entry flow at Bacton for 2000/01 of 1223 GWh/d.
- 2.40 Given that a maximum entry flow at Bacton of 1233 GWh/d can be achieved when it is assumed that 264 GWh is being exported through the Bacton

Interconnector, it might be expected that maximum available supplies to the NTS could be increased by 264 GWh/d by reducing the export flow to zero, and perhaps even increased by a further 271 GWh/d (a total of 535 GWh) by using the full reverse flow capacity. However, both of these additions would require there to be available NTS entry capacity at Bacton. The diversion of 264 GWh/d through the Interconnector, may be likely to have had the effect of actually increasing the maximum level of beach supplies that could be brought onto the NTS at Bacton, implying that the capacity to supply the NTS at peak times, excluding that provided by storage facilities, may be less than maximum beach flows in the absence of the assumed Interconnector export level. Even if this were not the case, the potential to divert flows on the peak day would depend on entry capacity being available over and above the maximum beach forecast at Bacton.

- 2.41 Given these points, and without evidence to the contrary, it does not seem reasonable to assume that the existence of the Bacton Interconnector results in an increase in the capacity to meet peak demands in the UK, over and above that estimated by Transco as maximum beach flows. Indeed, assuming that the Interconnector exports on the peak day may even inflate the maximum beach flow figure.
- 2.42 The Bacton Interconnector does, however, provide an increased swing potential for the NTS, since the extremes of its operational capabilities imply a difference in supply to the NTS of 899 GWh. Furthermore, the lead-time required for the renomination of Interconnector flows is comparable with those at storage sites. However, the Interconnector Agreement between Transco and IUK Ltd limits overall renominations to a much greater extent than the operational capabilities would suggest. In particular, renominations must be within 50% of the booked firm capacity level. This represents a potential increase or decrease in overall flows equivalent to about 150 GWh/d. Whilst considerably lower than the swing implied by operational capabilities, this remains a significant potential source of flexibility.
- 2.43 However, it can be noted that evidence on the use of the Bacton Interconnector to date suggests that its use as a flexibility tool has thus far been relatively limited

in relation to these magnitudes. In any case, usage of the Interconnector will be influenced by the contractual arrangements under which gas is being transported and supplied, and by the relationship between UK and Zeebrugge prices.

Increasing Sophistication of Flexibility Tools

- 2.44 The increasing development of more sophisticated flexibility tools – both in terms of supply - and demand-side flexibility – has the potential to develop close substitutes to physical storage. The most directly relevant example of this to date is the ‘virtual’ storage service ‘EnBank’, launched by Enron in the 1999/2000 storage year. The service is supported by a range of physical and financial contracts, but is sold in the form of traditional storage product, except with a wider range of durations on offer, and contract lengths available between 4 and 14 years at present. Customers are also not subject to daily revisions in the actual amount of capacity available to them, as is the case at Rough and Hornsea where daily adjustment factors are applied relating to physical conditions.
- 2.45 It can be noted that Enbank does not actually provide any new supply capacity. However, by defining contractual flexibility in terms of a storage product, Enbank can be expected to bring at least some part of beach swing potential and demand-side flexibility more directly into competition with storage services. Ofgem has no data on the amount of capacity that EnBank has sold at present.
- 2.46 Presently Transco uses linepack to provide itself with operational flexibility, but essentially it is a form of storage that could be made available to shippers. As part of the ongoing reform of the gas trading arrangements,⁵ it is envisaged that Transco will make linepack available on a commercial basis. Ofgem has proposed that linepack should be unbundled from transportation and sold via a non-discriminatory price auction. Transco will auction both LNG and linepack under rules that would prevent any discrimination or abuse of market power. If a linepack service were to be provided it could represent a significant competitor to Hornsea, LNG and other flexibility instruments.

⁵ The new gas trading arrangements. A review of the new arrangements and further development of the regime. A review and decision document. Ofgem July 2000.

2.47 Interruptible demand contracts can substitute for physical storage facilities in providing flexibility to both Transco and shippers/suppliers. As far as Transco's interruptible contracts are concerned, in March 2001 Ofgem published a consultation document on the reform of exit capacity, interruptions and LNG arrangements.⁶ The document sought views on the possible replacement of Transco's standard contract terms with the sale of bespoke interruptible contracts. These contracts would provide a market related price of the value of a site's interruption and would be indicative of that site's within-day flexibility. As such, these reforms have the potential to create another competing source of within-day flexibility.

Summary

2.48 Competition in the physical storage market is developing with the prospect of increased new entry. Significant quantities of bundled capacity rights at the Rough and Hornsea facilities have been sold until 2004/5. Relatively close substitutes for physical gas storage exist, including beach flexibility, interconnector capacity, 'virtual' storage, linepack and interruptible demand contracts.

⁶ The new gas trading arrangements: review of Transco's exit capacity, interruption and liquefied natural gas arrangements. Ofgem, March 2001.

3. Details of the proposed acquisition

Details of the Parties

BG Storage Ltd

- 3.1 BG Group, which currently owns BG Storage, is an integrated gas major with operations spanning exploration and production, LNG, transmission and distribution. BG Storage owns and operates two storage facilities (Rough and Hornsea) and has a 73% stake in the Easington onshore gas-processing terminal.
- 3.2 BG Storage, which forms part of the BG Group, does not itself hold any licences as granted under either the Gas Act 1986 and the Electricity Act 1989. BG Group holds a shipping and supply licence issued under the Gas Act.

Dynegy Inc

- 3.3 Dynegy's principal business segments include Energy Convergence (wholesale power and natural gas, coal, emission allowances, weather derivatives and broadband to transportation, gathering and processing of natural gas liquids), midstream services, transmission, and distribution. Dynegy is a leading energy merchant and power generator in North America, UK and continental Europe. The company is based in Houston.
- 3.4 Through Dynegy Europe Ltd (Dynegy Europe), Dynegy has been an active participant in UK energy markets since 1994. In 1999 Dynegy Europe entered the Nord Pool electricity market and the England and Wales electricity market.
- 3.5 Dynegy UK Ltd, which is a subsidiary of Dynegy Europe, holds a gas shipper licence.

Details of the proposed transaction

- 3.6 Under the transaction, the ownership and operation of BG Storage and associated assets will transfer to Dynegy. The assets include the partially depleted Rough offshore storage facility in the Southern North Sea, a 73% shareholding in the Easington onshore gas processing terminal, and nine salt cavities in Hornsea, east Yorkshire. In addition, BG Storage has recently secured

planning permission to develop six salt cavities at Aldbrough, Hornsea. The associated assets to be sold also include the remaining 27% interest in the Easington onshore gas processing terminal, which is owned by another BG Group subsidiary, the Amethyst gas processing and condensate transportation agreement, and BG Group's interest in the off-shore York discovery which extends into Block 47/3d.

- 3.7 BG Group will continue to utilise the gas processing facilities at Easington in order that BG Group can carry out its gas trading activities.
- 3.8 On 23 July 2001, the parties notified the proposed transaction to the Office of Fair Trading (OFT) for a decision by the Secretary of State to clear the transaction or to refer it to the Competition Commission.

4. Merger Control Process

- 4.1 This transaction falls within the scope of UK merger control law since the value of the assets exceeds the £70 million threshold under the Fair Trading Act 1973 (FTA). The transaction will therefore be assessed under the provisions of the FTA and the Secretary of State for Trade and Industry may refer the transaction to the Competition Commission if the transaction may, in the Secretary of State's opinion, give rise to significant competition concerns.
- 4.2 It is the responsibility of the OFT, headed by the DGFT, to advise the Secretary of State as to whether the transaction should be referred to the Competition Commission. In accordance with the concordat between the OFT and Ofgem, the OFT will consult Ofgem before advising the Secretary of State. Where the OFT advises that the transaction should be referred to the Competition Commission, the OFT may in lieu of such a reference advise that the Secretary of State invites binding undertakings from the parties to the transaction which would remedy any adverse effects on competition identified by the OFT.
- 4.3 Dynegy Europe Ltd notified its proposed acquisition to the OFT by way of a statutory Merger Notice. This means that the Secretary of State needs to reach a decision whether to refer the proposed acquisition to the Competition Commission or not within 20 working days from the first day after receipt of the notification. In this case, the Secretary of State will need to reach her decision by 20 August 2001. However, the OFT may extend this 20 working day period by a further 15 working days, so that the total period for consideration is 35 working days. If such an extension were granted in the present case, the deadline for the Secretary of State to reach a decision would be 10 September 2001. Ofgem is required to provide its advice to the OFT to suit the above timetable.
- 4.4 If the transaction is referred to the Competition Commission, the Competition Commission has to consider whether the transaction operates, or is likely to operate, against the public interest.
- 4.5 If the Competition Commission finds that the transaction does not, or is not likely to operate against the public interest, the Secretary of State must clear the

transaction. However, if the Competition Commission makes an adverse finding, the Secretary of State may (but he does not have to) take remedial action.

5. Potential issues arising from the proposed acquisition

- 5.1 Ofgem's initial view is that the central issues to be considered are:
- ◆ whether Dynegy should be subject to the same (or a modified version of the) Undertakings currently in place with respect to BG Storage; and
 - ◆ whether Dynegy should be subject to additional undertakings if any concerns are raised as a consequence of the transaction.
- 5.2 Ofgem does not believe, subject to consultation, that any issues are raised by Dynegy's acquisition of the associated assets as described in Chapter 3.

The present Undertakings

- 5.3 As noted above, the Undertakings given by BG plc were an agreement that were to apply for the five years up to and including the 2003/04 storage year and until this date would run concurrently with the Competition Act 1998. They set out the way in which Rough and Hornsea capacity would be brought to market over that period, and included a commitment to the full separation (including in respect of information) of the storage business from all other commercial activities of BG plc.
- 5.4 Undertaking 19 in particular specified that BG plc should secure the approval of the Director General of Gas Supply prior to a sale of the assets. It requires that the Undertakings should continue to apply to any purchasing party.

Dynegy's legal operational requirements

Making all capacity available on non-discriminatory terms

- 5.4 Dynegy has indicated what it believes are the relevant legal requirements (both EU and UK legislation) with respect to its potential operation of Rough and Hornsea.⁷ The current set of Undertakings are very explicit insofar as their pro-competitive objective of ensuring that all capacity is brought to the market on non-discriminatory terms, eg the obligation to offer unsold capacity at Rough and Hornsea in a series of annual auctions. The legal obligations as stated by

⁷ See Appendix 3.

Dynegy, however, are less explicit. This need not necessarily be problematic if the view were taken that general competition law now contained sufficient safeguards.

Discussion

- 5.5 Dynegy would have to demonstrate that it was meeting the requirement to offer all capacity to the market on non-discriminatory terms. Dynegy has stated that it is still consulting with storage customers regarding potential future products has indicated to Ofgem that it does not necessarily expect to operate the assets or sells services of the same nature as BG Storage has in recent years. Whilst this could make it more difficult to monitor compliance with the aims as currently stated in the Undertakings, it would not necessarily make it impossible.

Views Invited

- 5.6 Ofgem would therefore welcome views on how it would be possible to demonstrate compliance with the aims of the current Undertakings in the absence of explicit auctions and what measures should be taken to ensure that effective anti-capacity hoarding measures were in place.

Safeguarding the use of operational information

- 5.7 The current Undertakings include a commitment in relation to a 'robust internal physical, financial, informational and systems' separation of the storage business from all other commercial activities of BG. Undertaking 17 was included to ensure that other parts of the BG Group could not trade on the basis of what could potentially be market sensitive information regarding other shippers' injections and withdrawals from either facility.
- 5.8 In addition, BG Storage does not nominate through the shipping arm of BG plc but uses a number of shippers, under an agency arrangement. This prevents aggregate storage injection and withdrawal nominations being used by any one shipper for commercial advantage.
- 5.9 Dynegy has already indicated to Ofgem that the only legal requirement is for a full separation of the accounts for their storage business, and points to other storage providers not being obliged to keep their storage and trading arms

separate. Whilst it does not believe that it is legally obliged to have a full operational separation, Dynegy has indicated to Ofgem that such a possibility remains the subject of internal discussion.

Discussion

- 5.10 As indicated earlier in this document, although independent storage providers form a growing part of the storage market, in percentage terms they remain a small part of it.
- 5.11 The size of the Rough and Hornsea facilities are such that any operator may arguably have access to information relating to nominations that has the potential to have a significant impact on gas prices. Clearly, as competition in the storage market develops there may come a time in the future when any such potential concerns in relation to the ownership of Rough and Hornsea subside.
- 5.12 In assessing the possible requirement for the continued separation of the operation of the Rough and Hornsea storage facilities from its trading operations, it would be necessary to establish the extent to which Dynegy's ownership of Rough and Hornsea might give it access to market sensitive information. Much of the operational information relating to the use of the two facilities is already published on BG Storage's STORIT system and/or Transco's AT-LINK system, which can be accessed by storage customers and shippers.

Views Invited

- 5.13 Ofgem invites views on whether, in the absence of the separation of the storage from the trading functions of Dynegy, Dynegy's ownership of Rough and Hornsea would give it access to market sensitive information. Ofgem would also welcome views on whether any concerns regarding the safeguarding of information could be adequately addressed through ring fencing of the storage operation or the release of additional operational information to the market.

Purchase of associated assets

- 5.14 Dynegy's proposed acquisition of BG Storage also includes the Easington gas processing terminal, the Amethyst gas processing and condensate transportation agreement, and BG Group's interest in the offshore York discovery extending

into Block 47/3d (ie. the Rough field). The relationship between York discovery and the Rough field is as yet uncertain, and would only be an issue if it were the case that it ran underneath the Rough site. Ofgem is unable to confirm this point.

As we state above, subject to consultation, Ofgem does not believe that this aspect of the proposed acquisition raises any regulatory issues. We would, however, welcome respondents' views.

6. Way forward

- 6.1 Ofgem is seeking the views of interested parties on the acquisition of BG Storage by Dynegy Europe Limited, so that the Authority may make recommendations to the DGFT.
- 6.2 Whilst we invite views on the specific issues raised in this document, we would also welcome views on other issues raised by the merger, to the extent that they have not been highlighted in this document.
- 6.3 Responses will normally be available in the Ofgem library unless there are good reasons why they must remain confidential. Respondents should mark the part of their response (or whole response) which is to remain confidential, if this is the case, and where possible should consign any confidential material to appendices.
- 6.4 Comments on the proposed acquisition should be sent, by 5pm on 8 August 2001, to:

Amrik Bal
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Appendix 1 A background to the structure of present storage arrangements

Monopolies and Mergers Commission (MMC), 1993 report under the Gas Act 1986⁸

- 1.1 In 1993, the MMC examined the relationship between BG plc's transportation, storage activities, and trading activities in the non-tariff market, and recommended the separation of BG plc's monopoly transportation activities (which included storage) from its trading interests. It stated that the lack of effective neutrality of the transportation and storage system could be expected to inhibit the development of effective competition (in the non-tariff supply market).
- 1.2 During the process the MMC had taken evidence that the storage market was potentially competitive. At the time, however, BG plc was the only supplier of physical gas storage capacity and the MMC recommended that a separate price control formula be established for BG plc's storage business. This would ensure that the charges for transportation and storage services respectively were transparent. It would also limit the scope for cross subsidy of the potentially competitive storage business by the monopoly transportation business.

The Gas Act 1995

- 1.3 The Gas Act 1995 created the new licensable activity of Public Gas Transporter (PGT); this replaced the licensable activity of Public Gas Supplier. One aim of the new licensing regime was to separate the competitive activity of gas shipping and gas supply from the monopoly activity of transportation. Provisions relating to BG's storage business were included in BG plc's PGT licence. The Gas Act 1995 did not provide for the licensing of storage more generally, even though at the time it was clearly envisaged that new entrants might enter the market for physical gas storage services.

⁸ Volume 1 of reports under the Gas Act 1986 on the conveyance and storage of gas and the fixing of tariffs for the supply of gas by British Gas plc, MMC August 1993.

BG transportation and storage price control 1997 – 2002

- 1.4 Ofgas published its final proposals for BG's transportation and storage price control covering the period 1997-2002 in August 1996; these included a separate price control formula for BG plc's storage business.⁹ The proposals were rejected by BG plc and the matter was referred to the MMC by the Director General of Gas Supply.
- 1.5 BG plc maintained that once removed from the main transportation price control, its storage business should not be subject to further regulation. BG plc submitted to the MMC that its storage business already faced competition from a range of alternatives including beach swing, interruptible load and the purchase of spot gas.¹⁰ The Director General submitted that continued regulation under the Gas Act was necessary for a period since BG plc's storage business remained dominant in the gas storage market.
- 1.6 The MMC rejected BG plc's arguments that its storage business faced sufficient competition from alternatives such that further regulation was unnecessary. However, the MMC agreed that the price control formula could be disapplied after three years and a transition to competitive storage markets was clearly envisaged. When the MMC report was published, Ofgas stated that:

"Ofgas will be monitoring the development of competition within the storage market and will be working with Transco towards the removal of the price control at the earliest appropriate opportunity".¹¹

Ofgas review of the supply of storage and related services

- 1.7 Ofgas and BG plc had been discussing proposals for selling services provided by BG plc's storage facilities; services from the Hornsea facility were auctioned and the discussions focussed on whether services from the Rough field should continue to be sold at fixed pre-determined prices or by way of an auction. Ofgas and the majority of shippers favoured an auction. BG plc argued that

⁹ 1997 Price control review British Gas' Transportation and Storage, The Director General's Final proposals, August 1996.

¹⁰ MMC report, para. 5.10(a).

¹¹ BG Transportation and storage: The Director General's position following the 1997 Monopolies and Mergers Commission Report. Ofgas, June 1997.

under the terms of its PGT licence it could not be required to auction capacity at Rough. BG plc put forward pricing proposals for the storage year 1998/99.

Storage investigation

- 1.8 Ofgas did not veto the new proposals but immediately launched an investigation “to collect and assess evidence on the existence and use of market power in the provision of storage services”.¹² The investigation covered a number of issues including the availability of effective substitutes, including linepack,¹³ and the potential for new entry into the physical storage market. At the time all of BG plc’s storage facilities, including the LNG facilities, were under the control of BG Transco and were included in the review.
- 1.9 The preliminary conclusion of the investigation was that “BG Storage possessed significant short-term market power”. At the time several new storage projects were being developed by independent operators; Scottish Power at Hatfield Moors was one such facility that is now fully operational. Even if all these projects were completed, it was estimated that BG Storage would continue to control approximately 80% of space capacity and 90% of deliverability.¹⁴
- 1.10 Additionally, competitive pressures were building up from a number of other close substitutes. The UK-Belgium Interconnector became operational in October 1998 and with it came substantial potential import capacity. The investigation also noted evidence to suggest that BG Storage’s large customers were becoming more sensitive to price.
- 1.11 Although competitive pressures were building within the physical gas storage market and from close substitutes, the investigation also found a number of structural issues that mitigated against that process. For instance, the common ownership of BG Storage and Transco (which at the time were both businesses with BG plc) was viewed as a possible obstacle to the development of competition.

¹² Open letter to Industry 23 April 1998.

¹³ Linepack is the ability of BG Transco to ‘store’ gas in its pipeline system by varying the pressure within certain limits.

¹⁴ With the return of the LNG facilities to the control of BG Transco, BG Storage’s control over deliverability capacity will have reduced relative to their control over space. LNG sites were designed as peak shaving facilities and hence have high deliverability in relation to space.

Ofgas' Initial proposals

- 1.12 The core Ofgas' proposals was that BG Storage should be required to conduct auctions of up to 5 years for storage rights at Rough and Hornsea.¹⁵ Such rights were to be transferable and BG Storage would also be required to promote and facilitate a competitive and liquid secondary market in such rights. At the time Ofgas stated, that were BG plc not to agree to the Ofgas proposals or put forward acceptable alternatives, then the full range of legal courses of action would be considered. This included a reference to the MMC under the Fair Trading Act 1973; the outcome of such a reference could have been a recommendation to the Secretary of State for some form of divestment.

Final proposals

- 1.13 Ofgas did not consider divestment to be essential to reform providing that the core proposals were implemented in full and that adequate separation was established between BG Storage and Transco. BG plc proposed instead that references to Rough and Hornsea should be removed from its PGT licence and replaced with a set of 'undertakings'.
- 1.14 Ofgas agreed to remove the Rough and Hornsea facilities from the PGT licence provided adequate undertakings were in place.
- 1.15 The final proposals document reiterated the findings of the investigation:

"although the competitive pressures on BG Storage were increasing over time, BG Storage nevertheless enjoyed significant market power in the short term".

Development and implementation

- 1.16 When details of the development and implementation of the agreement with BG plc were published in December 1998, there was an expectation of a future

¹⁵ Review of the supply gas storage and related services, 'The Director General's initial proposals', Ofgas, July 1998.

competitive storage market.¹⁶ The agreement between BG plc and Ofgas was described:

“as marking a critical stage in the transition from administered prices and services, determined under regulatory supervision, to a market-based approach in which the services on offer, prices, investment etc. are freely determined in a competitive environment”.

- 1.17 With the removal of references to storage from BG plc’s PGT licence and the lack of a separate storage licence under the Gas Act for independent operators, it was clear that the ‘competitive environment’ envisaged would be unregulated except by the provisions of general competition law. When BG plc gave the Undertakings to Ofgas, the Competition Act 1998 had already gained Royal Assent. Given that the Undertakings were for five years, BG plc (and Ofgas) clearly understood that the Undertakings would remain for a period after the Competition Act 1998 came into force. As noted above, the absence of a separate storage licence meant that independent operators would not be subject to utility specific regulation.
- 1.18 BG plc’s LNG facilities remained regulated via its PGT licence and under the Gas Act 1986. This was pending a formal and separate review of LNG services, although Ofgas agreed that in the interim period, BG Storage should be able to operate these facilities. BG plc’s PGT licence, however, required that its transportation business (which, given the support they provide for relieving transportation constraints, continued to include all LNG facilities) is separated from all of BG plc’s other businesses. Therefore, without derogation or change to this licence requirement, BG Storage (a business unit that was by now separate from BG plc’s transportation business unit) would be unable to manage and operate the LNG facilities.
- 1.19 Ofgas granted BG plc such derogation allowing it, for one year only, (ie. until Ofgas had completed its review of LNG services) to operate in a way that would otherwise have constituted a breach of BG plc’s PGT licence.

¹⁶ Review of the supply of gas storage and related services. Development and implementation of the agreement between Ofgas and BG plc. Vol. 1: Consultation document. Ofgas, December 1998.

Decision

- 1.20 In February 1999, Ofgas published its decision document on the storage deregulation process. The document set out the underlying objective of the storage review, which were to ensure that:

“all capacity is made available in a way that ensures efficient utilisation and on terms that are non discriminatory and that do not distort competition.”

- 1.21 The document also stated the criteria for evaluating BG Storage’s conduct against this objective. The decision document formalised the ‘competitive benchmark’ approach. The investigation determined that “all of the facilities were capital intensive...with a large fraction of the operating costs not closely related to output”. Given these cost characteristics it would be expected, therefore, that capacity utilisation (especially space) would be high were there a genuinely competitive market in storage services. It was on this basis that the competitive benchmark was established.

- 1.22 Having negotiated the Undertakings as a means of making all capacity available on non-discriminatory terms, the revenue cap and references to Rough and Hornsea were duly removed from BG plc’s PGT licence. The Undertakings would remain in place up to the end of the 2003 storage year, that is 30 April 2004. The Decision document noted that:

“the future level of regulation of the storage business will depend upon the extent to which BG Storage will continue to possess market power”.

- 1.23 In June 1999, Ofgem published a consultation document seeking views on how BG plc’s other storage facilities, the Liquefied Natural Gas (LNG) sites, should be regulated from 2000.¹⁷ Ofgem subsequently developed proposals for deregulating the LNG facilities from 1 May 2000, through the auctioning of capacity. After consultation, the proposals were implemented in April 2000.

¹⁷ Ofgas review of BG plc’s Liquefied Natural Gas facilities, a consultation document’ June 1999.

Appendix 2 The Undertakings given by BG plc to the Director General of Gas Supply

Introduction

- 1 (a) BG plc ("BG") is the holder of a public gas transporter's licence (the "Licence") treated as granted to it under Section 7 of the Gas Act 1986 (the "Act").
- (b) On 24 December 1998 the Director General of Gas Supply (the "Director") gave notice (the "section 23 notice") pursuant to Section 23 of the Act that he proposes to modify the standard and special conditions of the Licence. These proposals were made in contemplation of BG giving to the Director undertakings in the form set out below and will have the effect of removing storage arrangements which relate to the utilisation of an offshore gas storage installation or storage cavities in natural strata from the ambit of the Licence.
- (c) BG is subject to a duty pursuant to Regulation 3 of the Gas Safety (Management) Regulations 1996 (the "Regulations") to prepare a safety case. Changes are needed to that safety case (the "Top-Up Changes") so that the provisions of BG's network code can be amended so as to remove from that network code BG's obligations as Top-Up Manager as therein defined without placing BG in breach of Regulation 5 of the Regulations.
- (d) BG hereby:
 - (i) irrevocably consents to the making of the modifications described in the section 23 notice; and
 - (ii) on condition that the Director modifies the Licence substantially in the manner described in the section 23 notice, gives to the Director the undertakings set out in paragraphs 2 to 21 below with effect from the date of such modifications.

Interpretation

2. In these undertakings unless the context otherwise requires:

“1999 Storage Year” means the Storage Year starting on 1 May 1999

“auction procedures” means the document to be drawn up by BG pursuant to paragraph 5 as modified from time to time

“competition law” means any law relating to the existence or exercise of market power or to agreements which may prevent, restrict or distort competition and includes, without limitation, the provision of Articles 85 to 93 inclusive of the Treaty of Rome (as numbered at the date of these undertakings), the Fair Trading Act 1973, the Restrictive Trade Practices Act 1976, the Competition Act 1980 and to the extent that it is at any time in force the Competition Act 1998

“firm rights” means rights to have gas injected into a storage facility, to keep gas in a storage facility or to have gas delivered from a storage facility which shall be exercisable in priority to any interruptible right

“future operations statement” means the statement to be prepared by BG pursuant to paragraph 6

“HSE” means the Health and Safety Executive

“Hornsea Facility” means the gas storage facility at Hornsea in Yorkshire operated by BG at the date these undertakings were entered into

“maximum physical capacity” means in respect of each of the Rough Facility and the Hornsea Facility the maximum physical capacity for the injection of gas, the storage of gas and the delivery of gas which can be safely and economically provided at each facility at the date of these undertakings and which is understood to be not less than the capacities set out in the following table:

	the Rough Facility	the Hornsea Facility
Injectability	160 GWh/Day	21.6 GWh/Day
Storage Space	30,300 GWh	3,500 GWh
Deliverability	455 GWh/Day	195 GWh/Day

“Rough Facility” means the offshore gas storage facility in the Rough gas field operated by BG at the date these undertakings were entered into

“storage business” means the activities from time to time of BG connected with the development, administration, maintenance, operation and sale of services in connection with any facility used by BG for the storage of gas other than facilities

- (a) used solely for diurnal storage
- (b) afforded by, or connected to, an independent system or facilities for the conveyance of gas which BG uses exclusively for the conveyance of gas to such a system or
- (c) in the event that the derogations given by the Director in respect of the LNG Storage Business (as defined in amended standard condition 2 of BG’s licence) dated 18 February 1999 from certain provisions of Special Condition 8A and Standard Condition 11 of the Licence (or any extension thereof) have ceased to have effect, in which gas is stored as liquefied natural gas

“storage services contracts” means the documents to be drawn up by BG pursuant to paragraph 8 as modified from time to time

“Storage Year” means a 12 month period starting on 1 May in any year

“term of rights” means the period of years in respect of which firm rights to capacity are to be offered for sale by auction pursuant to these undertakings.

1999 Auction

3. BG shall:
 - (a) no later than 1 May 1999 offer for sale by way of auction firm rights to 100% of the maximum physical capacity for each of the Hornsea Facility and the Rough Facility (the "1999 auctions");
 - (b) offer for sale in the 1999 auctions firm rights to at least 50% of the maximum physical capacity for each of the Hornsea Facility and the Rough Facility for a term of rights of not less than five years commencing on 1 May 1999; and
 - (c) offer for sale in the 1999 auctions firm rights to the balance of the maximum physical capacity for each of the Hornsea Facility and the Rough Facility remaining after completion of the auctions referred to in paragraph 3(b) including any rights offered for a term of rights of at least five years but not sold on that basis for a term of rights of not less than one year commencing on 1 May 1999.

4. (a) BG shall offer for sale in separate auctions:
 - (i) firm rights in respect of each of the Rough Facility and the Hornsea Facility; and
 - (ii) firm rights for different terms of rights.

- (b) Unless the Director otherwise consents BG shall conduct the 1999 auctions in the following order:
 - (i) first in respect of firm rights for a term of rights of at least five years in respect of the Hornsea Facility;
 - (ii) second in respect of firm rights for a term of rights of at least five years in respect of the Rough Facility;
 - (iii) third in respect of firm rights for at least one year in respect of the Hornsea Facility; and
 - (iv) fourth in respect of Firm Rights for at least one year in respect of the Rough Facility.

Auction Process

- 5. BG shall conduct the 1999 auctions in accordance with the arrangements set out in the document prepared by BG dated 17 February 1999 entitled the "auction procedures" which has been approved by the Director.
- 6. Prior to the 1999 auctions BG will make available documentation setting out its intention with regard to the operation of the storage business ("the future operations statement") until the end of the Storage Year beginning on 1 May 2003.
- 7. BG shall publish the auction procedures, the future operations statement and the storage services contracts and send a copy of the auction procedures, the future operations statement and the storage services contracts free of charge to any person who asks for such copies.

Storage Services Contracts

- 8. BG will offer to enter into a contract with each successful bidder in each auction on the terms and conditions set out in the documents which have been approved by the Director for that purpose.
- 9. BG will sell to each successful bidder firm rights to have gas injected into storage, to keep gas in storage and to withdraw gas from storage in each of the Rough Facility and the Hornsea Facility in the following proportions (as set out in the auction procedures):

	Deliverability (kWh/Day)	Storage Space (kWh)	Injectability (kWh/day)
Hornsea Facility	1	17.948718	0.110769
Rough Facility	1	66.593407	0.351648

Subsequent Storage Years

- 10. (a) In respect of each Storage Year subsequent to the 1999 Storage Year up to and including the Storage Year starting on 1 May 2003 (the "subsequent storage years"), BG shall offer for sale by auction firm rights to any proportion which remains unsold of the maximum

physical capacity of the Hornsea Facility and of the maximum physical capacity of the Rough Facility.

- (b) In each of the auctions referred to in paragraph 10(a) above, BG shall offer for sale by auction firm rights to capacity in respect of a term of rights of one or more years.
11. (a) This paragraph will apply only if in either of the auctions referred to in paragraph 3(b) above BG sells firm rights to less than 50% of the maximum physical capacity of the Hornsea Facility or to less than 50% of the maximum physical capacity of the Rough Facility.
- (b) **If this paragraph applies BG will offer for sale by auction before 1 May 2000 firm rights to a proportion of the maximum physical capacity of each of the Hornsea Facility or the Rough Facility equal to the difference between the proportion of the maximum physical capacity of each facility sold in the auctions referred to in paragraph 3(b) above and 50% of the maximum physical capacity in each facility (the "1999 capacity shortfall") for a term of rights of at least four years starting on 1 May 2000.**
 - (c) If not all of the 1999 capacity shortfall is sold in the auction referred to in paragraph 11(b) BG will offer for sale by auction before 1 May 2000 firm rights to a proportion of the maximum physical capacity of the Rough Facility and to the maximum physical capacity of the Hornsea Facility equal to the unsold proportion of the 1999 capacity shortfall (the "2000 capacity shortfall") for a term of rights of at least three years starting on 1 May 2001.
 - (d) If not all of the 2000 capacity shortfall is sold in the auction referred to in paragraph 11(c) above BG will offer for sale by auction before 1 May 2002 firm rights to a proportion of the maximum physical capacity of the Rough Facility and to the maximum physical capacity of the Hornsea Facility equal to the unsold proportion of the 2000 capacity shortfall for a term of rights of at least two years starting on 1 May 2002.

12. (a) In the event that BG offers for sale by auction in any year firm rights to capacity in the Hornsea Facility or in the Rough Facility pursuant to these undertakings in respect of any one or more of the subsequent storage years for more than one term of rights except as the Director may otherwise consent it shall offer for sale by auction first those firm rights offered for the longest term of rights and in each subsequent auction by decreasing term of rights. Any firm rights not sold for a term of rights of more than one year shall subsequently be offered for sale by auction again for a term of rights of one year.
- (b) In respect of each term of rights BG shall offer for sale by auction firm rights to capacity in the Hornsea Facility before offering for sale by auction firm rights in the Rough Facility.
- (c) Prior to conducting any auction in respect of firm rights to capacity in any subsequent storage year BG will make available the future operations statement, suitably updated.
13. (a) Each of the auctions provided for in paragraphs 10 and 11 shall be conducted according to the auction procedures modified only (other than in accordance with paragraph 13(c) below) to take account of the change of year. Except with the consent of the Director, which will not be unreasonably withheld so far as concerns modifications which facilitate the separate auctioning of the rights referred to in paragraph 9 above, the firm rights offered for sale in those auctions shall be the rights defined in the auction procedures and the storage services contracts.
- (b) Upon completion of the 1999 auctions and in June of each of 2000, 2001 and 2002 BG and the Director shall jointly review the auction procedures (the "annual review"). The annual review shall consider the mechanics of the auction with the aim of agreeing any modifications to the auction procedures, including reserve prices (which, if 100% of the firm rights to capacity are not sold in any Storage Year, may be reduced), warranted by the conclusions of that review.

- (c) The auction procedures and the storage services contracts shall not be modified, other than by agreement between the Director and BG.

Capacity not sold at auction

- 14. In any Storage Year up to and including the Storage Year starting on 1 May 2003:
 - (a) except with the consent of the Director, BG shall offer for sale any firm rights to any proportion of the maximum physical capacity of the Rough Facility or of the Hornsea Facility in respect of that Storage Year which remain unsold at the start of that Storage Year at a price equal to the reserve price in respect of the most recent auction of firm rights to capacity in that facility; and
 - (b) subject to paragraph 14 (a) BG shall not sell or offer for sale firm rights in respect of any proportion of the maximum physical capacity of the Hornsea Facility or of the Rough Facility other than in accordance with these undertakings except with the consent of the Director.

Secondary markets

- 15. BG shall facilitate the development of a secondary market in each of the firm rights to capacity sold by it pursuant to these undertakings by
 - (a) ensuring that injectability, space and deliverability rights are defined in ways which allow them to be traded separately; and
 - (b) establishing arrangements that allow for the transfer, on a basis which is not unreasonably restricted, of all or any part of the rights purchased under the auctions described above at the request of the holders of those rights.

Competition law

16. (a) BG will conduct the storage business (whether using existing, enhanced or new facilities) and such other storage operations as it may from time to time develop in such manner as to comply with the requirements from time to time of competition law.
- (b) Pending the coming into force of the provisions of the Competition Act 1998 relating to the abuse of a dominant position (the Chapter II prohibition) BG as operator of the Rough Facility and the Hornsea Facility will not act in such a way that the storage business obtains any unfair commercial advantage compared to any other person offering storage services using those facilities.

Separation

17. BG will use all reasonable endeavours to complete a robust internal physical, financial, information and systems separation of the storage business from all other commercial activities (except the Common Service Business as defined in Standard Condition 2) carried on by BG by 30 April 1999.

Top-Up

18. To the extent that the Top-Up Changes are material for the purposes of Regulation 4 of the Regulations BG will expedite discussions with the HSE with a view to obtaining the HSE's acceptance of the Top-Up Changes as soon as possible.

Disposal of storage facilities

19. BG shall not dispose of:
 - (a) the Rough Facility or of the Hornsea Facility or any part thereof; or
 - (b) any interest in any wholly owned subsidiary to which any interest in the Rough Facility or the Hornsea Facility or any part thereof has been transferred;

other than to a wholly owned subsidiary without the consent of the Director which will not be withheld so long as the person to whom the facility is transferred:

- (i) provides to the Director undertakings in the form of these undertakings excluding paragraph 18; and
- (ii) is a person in respect of whom the Director is satisfied as to its ability to comply with and perform such an undertaking,

and will not otherwise be unreasonably withheld.

20. If BG transfers the Rough Facility or the Hornsea Facility to a wholly owned subsidiary it shall procure that that subsidiary shall comply with the provisions of these undertakings as if that subsidiary had given such undertakings to the Director.

Termination

21. These undertakings shall terminate at the end of the Storage Year beginning on 1 May 2003.

.....
For and on behalf of BG plc

Date:

Appendix 3 Dynegy's view of its legal obligations regarding the operation of Rough and Hornsea

- 3.1 Dynegy will conduct the storage business in such a manner as to comply with the requirements of competition law.
- 3.2 Dynegy shall negotiate, in good faith with all interested third parties, for non-discriminatory access to the storage facilities.
- 3.3 As provided for in 'The Gas (Third Party Access and Accounts) Regulations 2000', Dynegy shall publish at least once each year the main commercial conditions relating to the grant to another person of a right to have gas stored in the 'Dynegy Flex' program. Additionally, Dynegy Flex shall publish any changes to the published conditions as soon as they become effective. The main commercial conditions shall include:
 - a) such information as would enable a potential applicant to have gas stored in a facility (if applicable) and to make a reasonable assessment of, or the method of calculating, the cost of acquiring storage rights.
 - b) other significant terms on which such a right would be granted.
- 3.4 Dynegy shall also ensure that the conditions, which are to be published, do not discriminate against any of the applicants for a right to have gas stored in the facility.
- 3.5 Dynegy shall ensure the separation of the accounts (ie. storage accounts will be kept separate from all other activities) in such a manner as to meet the requirements of Section 221 of the Companies Act 1985, as if storage were the only business being undertaken by Dynegy.
- 3.6 These Undertakings shall terminate at the end of the storage year beginning 2003.