

Gas SCR: Workshop 1 - the range of options for reform of the emergency arrangements

Date: Friday 21st January 2011
Time: 09:30 – 12:30
Location: Room 9, Ofgem offices, 9 Millbank, Westminster

1. Attendees

1.1. A list of attendees is contained in attachment 1.

2. Introduction

Giles Stevens, Head of Competition Economics, Ofgem

2.1. Giles Stevens commenced the workshop by welcoming attendees and thanking them for attending. He provided a brief summary of Tuesday's opening seminar citing the general success and focussing on some of the issues that had been raised such as the involvement of the distribution networks and the importance of Value of Lost Load. He ended by outlining the process for the stakeholder events going forward and the topics of discussion for each of the workshops, as below:

- 21/01/11: Workshop 1 - the range of options for reform of the emergency arrangements
- 28/01/11: Workshop 2 - VoLL and compensation arrangements
- 04/02/11: Workshop 3 - obligations and our criteria for the Impact Assessment
- 09/02/11: Closing Seminar – round up of the issues raised and discussion at the workshops.

3. Discussion

Gas Distribution

3.1. Before commencing with the agenda, Peter Sherry mentioned that the issue of interactions between the Gas SCR and the gas distribution networks would be discussed internally with the Gas distribution team at Ofgem in the first instance. It would then be decided if the Gas SCR team would need to work more closely with the gas distribution network companies as the process developed.

What are we trying to achieve?

- 3.2. Peter went on to initiate discussion by presenting the team's objectives and asking attendees if they agreed with these. The objectives presented were;
- minimising the likelihood of an emergency occurring;
 - providing the right incentives to get out of an emergency if one was to occur; and
 - compensating firm customers in the event of firm load disconnection.

Type of emergency

- 3.3. One attendee questioned the scope of the SCR and whether this would capture all the events which may cause an emergency to arise. The attendee gave the example of local or national network constraints and suggested that emergency scenarios were more likely to be caused through this event than through an overall shortage of supply. While accepting that there were improvements to be made in the arrangements surrounding a gas supply emergency, they put forward the merits of a holistic approach in order to avoid the risk of providing incentives in the wrong place.
- 3.4. This view was supported by other attendees who pointed to the fact that a consumer is not aware of or interested in the reasons why they have been cut off but only in the fact that they are not able to receive a supply of gas. In this regard, it was suggested that the same level of compensation should be paid whatever the reasons behind the disconnection.
- 3.5. This point was used by another attendee to question why a shipper should be exposed to expensive compensation payments when the problem may be due to a network constraint.

Importance of the market

- 3.6. One attendee emphasised the importance of considering impacts other than simply the speed of recovery from an emergency. They suggested that it was also important to minimise potential for long-term damage to the market and to the physical system when setting incentives to get out of an emergency.
- 3.7. There was some discussion around consideration of European issues including the Third Energy Package and cross border interactions. Attendees differed in views as to whether the European Market was liquid enough to ensure that the highest price could guarantee supply.
- 3.8. A number of attendees highlighted the importance of the market in providing the necessary incentives and suggested that this view was strengthened by the European Gas Security of Supply Regulations which set out market mechanisms as the primary tool for providing security of supply.
- 3.9. Ofgem representatives highlighted their views that the market had been working to date and that if through this review we could be confident that the market could continue to work then we would select the option which was most compliant with the market. However if it was considered that the market may not be able to deliver the required security of supply then we may consider a different route.

Credit and impact on suppliers

- 3.10. The issue of credit in relation to the use of VoLL for compensation was raised at this point and a number of times throughout the workshop. It was considered that there would be an increased risk of financial distress associated with compensation of disconnected customers at this level. This was considered an issue for all suppliers but in particular for small suppliers. In addition, it was thought that these credit requirements could have a negative impact on market liquidity and create barriers to entry.

Our proposed options

3.11. The discussion then moved on to the options presented in the Initial Consultation paper¹ and attendees were asked for their views on the options in general.

Different options for different emergencies?

3.12. One attendee put forward the case for different options to be in place depending on how the emergency developed. In the case that an emergency gradually developed over time they suggested that option 1 may be preferable. However, they felt that option 2 or 3 may be better at dealing with an emergency that escalated rapidly (due to an infrastructure explosion for example).

3.13. When this was raised again at a later stage, it was suggested that the emergency arrangements could help to avoid an emergency of the 'slow build-up' type. However it was considered that there was little that the market could do to avoid a sudden 'failure of supply' type emergency in which case it would be more important to provide appropriate arrangements for managing and getting out of the emergency.

3.14. Others argued against this highlighting the medium term nature of potential incentives to avoid an emergency that could encourage suppliers to diversify their sources of gas therefore reducing the risk of both types of emergency. This was viewed as particularly important given that domestic sources of gas are expected to continue to decline.

Interaction with electricity

3.15. A number of attendees highlighted interactions between electricity and gas and emphasised that unintended consequences of revisions to the gas arrangements on the electricity market must be carefully considered. For example, it was thought important to avoid cross subsidies from one market to the other and to ensure that there are no avoidable knock on effects onto security of supply in electricity.

3.16. In this regard, it was suggested that the ability of National Grid Gas (NGG) and the Network Emergency Coordinator (NEC) to work together and consider the impacts of the emergency plan on the electricity sector was very important. One representative outlined the current remit of the NEC which was to form a strategy for dealing with an emergency with a focus on safety of the network with a small amount of consideration for the electricity sector. For example, the NEC would endeavour to avoid an electricity black-start or switching off electricity generators if this were possible without compromising safety of the gas system.

3.17. The point was made that some customers may value their electricity supply more highly than their gas supply and so, a gas emergency which led to disconnection of electricity in addition to gas may result in a VoLL which could be significantly higher than that for a loss of gas alone.

Priority order

3.18. This led to some discussion around the role of the priority order in deciding the order of firm-load disconnection. It was suggested that this priority order may need to be considered in order to reflect the interactions between electricity and gas.

3.19. This led to a discussion around how VoLL and the priority order could work together. It was suggested that the priority order is currently (and for good reason) a little

¹ See attachment 2 for the table of options and pros and cons of each option as presented in our Initial Consultation paper.

vague in order to provide the NEC with some flexibility around the order of curtailment. It was questioned how this could work alongside multiple VoLL levels.

- 3.20. One attendee made the point that when the NEC is considering curtailment of load from an emergency perspective there may not be time to consider disconnection at different levels of VoLL. In addition, it was considered that the transmission system is only part of the story and that the distribution networks have an important part to play in deciding the order of curtailment when they are instructed to disconnect loads from their distribution networks.

Option 1

- 3.21. Following a discussion of the options in general, Peter went on to present option 1 and talk through its characteristics, in particular the incentive to bring gas onto the system up to an administrative level of VoLL through a dynamic cash-out price. He suggested that option 1 was the most market-based option of the three presented in the Initial Consultation paper in that it relied on the dynamic cash-out price to attract gas from all sources.
- 3.22. Before opening up to discussion, Peter made the point that the characteristics of the three options meant that they would have many benefits and disadvantages in common. This meant that a longer conversation was expected on option 1 than options 2 and 3 and the agenda was structured to reflect this. This did not mean that Ofgem were favouring any of the options at this stage.

Type of emergency

- 3.23. The point was made again that option 1 may not work in the event of a sudden incident which may lead to an emergency such as an explosion at an important supply infrastructure. In this event, the market may not have time to respond and the NEC may not be able to consider the different levels of VoLL for different customer types when deciding upon the priority order.
- 3.24. Peter debated this point by comparing option 1 with the current arrangements. He made the point that currently the cash-out price could be frozen at a low level in the event of a sudden emergency. This could lead the NEC to disconnect firm load customers relatively quickly and at a level far below that which they are willing to pay for their supply. In contrast, the arrangements set out in option 1 would allow the market to try and deliver the required gas up to the level of VoLL when firm load disconnection would be initiated.
- 3.25. This was supported to some degree by another attendee who said that even in a very fast lead up to an emergency, the NEC would still take the time to formulate an emergency strategy and that it is likely that the market would be able to react very quickly.

NEC's role

- 3.26. There was some concern around the change to the NEC's role at stage 2 and above of an emergency. One attendee thought that it may be dangerous to remove the ability of the NEC to direct a party to flow gas onto the system if, for whatever reason, the market signal did not provide a sufficient incentive to do this. They suggested that it may be difficult to prove that any arrangements that removed the power of the NEC to direct a party to flow gas would be at least as safe as the current arrangements.
- 3.27. An Ofgem representative suggested that it may be a case of considering the balance between encouraging domestic and non-domestic gas onto the system. While removing these arrangements may provide a little more risk of domestic sources not

flowing gas onto the system the alternative arrangements may significantly increase the incentives for non-domestic sources to supply gas to GB.

- 3.28. In response, the point was made that domestic supply may have a significantly faster response time than non-domestic gas which may be essential in order to get out of an emergency situation as quickly as possible.
- 3.29. This issue was raised again later in the workshop with one attendee suggesting that it would not be possible for an LNG cargo that was out at sea to respond to the market signals in time to alleviate the shortage of gas before emergency curtailment (especially in the case of a rapidly escalating emergency).

Incentives for non-domestic gas

- 3.30. The group then discussed the incentives for non-domestic shippers to supply gas to the GB market. Concerns were raised that even if suppliers purchase gas up the level of VoLL, it is still possible that a shipper may be able to find a higher price elsewhere and so sell their gas to that market.
- 3.31. In response to this, one attendee suggested that this is the case with the current arrangements and that the only way to guarantee imports would be through some sort of capacity mechanism.
- 3.32. In addition, it was argued that consumers would only benefit up to their level of VoLL after which, by definition they would no longer be willing to pay for gas supply. Therefore, it would be the desired result for gas supplies to be diverted to a country that was willing to pay more than VoLL resulting in disconnection as this could in fact be the most efficient outcome.

VoLL as a target price

- 3.33. While it was highlighted that a shipper's current licence obligations would prevent them from exploiting an emergency situation to a certain degree, the point was made that care must be taken not to provide a perverse incentive to drive up the price to somewhere near the level of VoLL by withholding gas.
- 3.34. This was supported by another attendee who compared an administrative VoLL to the current frozen cash-out arrangements. In contrast to the frozen level of cash-out which is unknown, it was suggested that VoLL is, in effect, a known price cap which may be used as a target price by shippers towards which they could intentionally drive up the price.
- 3.35. However, a number of other attendees argued that in the globally competitive gas market, shippers would not wait for the price to go up and would deliver their gas to GB if the price was the highest available.

Level of VoLL

- 3.36. While the use of VoLL as a level at which to cap the cash-out price and to compensate disconnected firm load customers was supported in theory, its use in practice was considered to be more of an issue.
- 3.37. In particular, it was noted that while some customers may have very high VoLLs which may be reflective of their preferences, the corresponding compensation requirements could increase the likelihood of financial distress for shippers and suppliers.

- 3.38. One attendee mentioned that consumers had had the opportunity to provide their VoLL for use in gas distribution price control review 1 (GDPCR1) but suggested that this had not been as successful as expected. In this regard, the question was raised as to whether some arbitrary price may be used in place of a lack of information as to customers' level of VoLL.

Investment incentives

- 3.39. One attendee cited domestic storage as essential in securing future security of gas supply. In this regard, this attendee questioned what was being done to make sure that investment was being encouraged given the backdrop of two projects being cancelled recently due to regulatory uncertainty.

Small suppliers

- 3.40. The importance of the day-ahead market to small suppliers was raised by one attendee. This representative suggested that there may be a risk of these markets drying up in the event of an emergency which could have a disproportionate impact on small suppliers who may be too small to purchase gas from storage facilities.

Credit requirements

- 3.41. In order to stimulate discussion around the credit requirements of suppliers given a certain level of VoLL, Peter asked what the likely impacts of a hypothetical administrative VoLL of £20 per therm would be.
- 3.42. This triggered a response suggesting that this would cause all shippers significant financial distress due to the increased credit requirements which could lead to cash calls. It was thought that this would be a particular problem for small suppliers who may be in the position where they have to top up credit as required and may not be able to afford the additional credit which may send them out of business. There was also concern that the additional credit requirement may present a significant barrier to entry.
- 3.43. In addition, one attendee cited the snowball effect of one party going bankrupt. As the costs of this would be spread across all parties, this could cause further financial distress to the rest of the industry.
- 3.44. On the other hand, one attendee stated that the risks associated with a high level of VoLL could be partly alleviated through the ability to quantify the risk due to the level of VoLL being known ex ante. In contrast, the current frozen cash-out price would not be quantifiable until after the event and so the level of risk could not be estimated with any accuracy.
- 3.45. It was also suggested that there may be an incentive on traders to gamble even more heavily when entering an emergency with such a high level of VoLL. This could, in theory, result in one hugely out of balance party placing a financial penalty on the rest of the industry who may have a balanced position.
- 3.46. The issues surrounding additional credit requirements under option 1 and in particular the effect that this may have on small suppliers was repeated a number of times throughout the workshop.

Modification 260

- 3.47. In response to a question from Ofgem about how the current arrangements would be able to deliver gas following stage 2 of an emergency, one attendee cited modification 260 as intended to resolve this.

- 3.48. However, it was argued by others that modification 260 only allowed the same price to be paid for gas delivered to GB as to a competing market and with an associated delay and risk associated with the level of payment received.
- 3.49. While this view was generally supported, the strength of the market in responding to gas shortages was raised again and the importance of finding a solution that worked with the market was emphasised.

Demand Side Response (DSR)

- 3.50. The importance of DSR to avoid and get out of an emergency was raised. It was suggested that Ofgem should perform an information gathering exercise in order to discover the current level of DSR interaction with the gas industry.
- 3.51. Ofgem representatives agreed with the importance of encouraging DSR and made it clear that one of the objectives of the review is to provide incentives to encourage interruptible contracts.
- 3.52. However, there was some debate around the likelihood of customers to enter into interruptible contracts. One attendee suggested that for some industrial consumers, a loss of supply of gas could result in a failure to fulfil contracts and to going out of business. It was argued that this type of consumer would be unlikely to sign an interruptible contract at any level.
- 3.53. The lack of the required metering technology was also put forward as a barrier to interruptible contracts. The point was made that only 2,500 out of 400,000 industrial consumers currently have the daily-metered meters that are required to allow for entry into an interruptible contract. To this end, the importance of the smart metering roll out and how this was performed was targeted as essential and the group encouraged joined up thinking from Ofgem on the two areas.
- 3.54. A number of attendees mentioned the importance of allowing a small volume of gas to be supplied to certain industrial customers while maintaining the ability to curtail the majority of their load. This would allow essential machinery to continue to run at a low level in order to avoid the need for full start up which could be disproportionately time consuming and expensive.
- 3.55. Interactions between gas and electricity were again considered important here. For example, the point was made that for the sake of a relatively small amount of gas supply, a very large gas fired coal power station could continue to run thus avoiding loss of electricity supply in addition to gas disconnection. Conversely, one attendee suggested that Ofgem should consider placing obligations on CCGTs to hold distillate backup, which would benefit gas security of supply.

Option 2

- 3.56. Peter went on to present the key characteristics of option 2. He summarised the costs and benefits of the option by suggesting that it is possibly less effective at avoiding an emergency but may be considered as having safety benefits if an emergency were to occur.

NGG sole purchaser role

- 3.57. A number of attendees questioned why NGG would be better placed to purchase gas in the event of an emergency than the market. In particular, concerns were raised regarding the ability of NGG to source non-domestic gas compared to a shipper, as shippers are likely to have contacts and commercial arrangements in place (which NGG has not).

- 3.58. It was suggested that if NGG were to take on this role, it would be a significant change to their current remit and this may require the development of a skilled set of workers within the company.
- 3.59. One attendee believed that there could be benefits in having one centrally managed purchaser of gas in an emergency. However, it was thought that this may have downsides in recouping the greater costs.
- 3.60. One attendee looked towards the European Gas Security of Supply regulations that were adopted in October 2010. They proposed that the arrangements for a sole purchaser under option 2 may be the most suitable for meeting possible requirements for Transmission System Operators (TSOs) to coordinate gas supplies which may be included in the changes.

Funding

- 3.61. The group then went on to discuss the issue of funding. The risks of a double provision of insurance were raised. It was considered that both shippers and NGG may have to insure against the event of an emergency under option 2.
- 3.62. The group agreed that funding would be the difficult issue for this option as well as for option 1 (due to the increased credit requirements). One attendee proposed that in order to get the gas to come to the GB market, someone would have to have the necessary credit to purchase it. The problem with option 2 may be in deciding who this party would be and how this arrangement would work.
- 3.63. Comparisons were made with the oil industry where participants come together to self insure. It was suggested that this could be an option in the gas market.
- 3.64. Another attendee suggested that insurance may not be as expensive as first thought given the very low probability of an emergency occurring. This point was debated as others argued that while an emergency hasn't happened to date, compensation at VoLL under the new arrangements may only be 'one step away'. In addition, some attendees said that while the probability may be very low, the associated costs of an emergency could be extremely high and that this would be reflected in insurance costs.

Network issues

- 3.65. There was a discussion around the role of the networks in an emergency and the locational aspects of a potential gas supply emergency. One attendee made the point that following disconnection in one part of the system, gas may be required at a certain location and input into a different part of the system may not help to alleviate the emergency.
- 3.66. Building on this, another attendee said that where the problem is in getting gas from one point of the system to another, it should not be the supplier who is responsible for paying the necessary compensation.
- 3.67. It was also suggested that the European Gas Security of Supply Regulations may require a regional approach to security of supply to be required.

'Least worst' scenario

- 3.68. While the potential benefits of option 2 were not considered to be as significant as those under option 1, it was considered important by some that the option remains on the table as the 'least worst' option. In other words, if it was decided that there was too much risk associated with the introduction of option 1 (due to the additional credit

required to purchase gas at very high prices, for example) then those attendees could see a potential benefit of introducing the option 2 arrangements as compared to those currently existing.

Option 3

3.69. Peter went on to ask attendees for their opinions on option 3 and whether it would create the right incentives to maintain a balanced position in the lead up to an emergency.

Incentives to balance

3.70. Attendees agreed that the incentives to balance under option 3 may not be as strong as under the other options but suggested that incentives to balance would exist in order to avoid the risk of having to pay potentially punitive compensation payments in the event of being short. It was argued that this may in fact provide an incentive to attempt to take a long position in the lead up to an emergency in order to mitigate this risk further.

Compensation arrangements

3.71. The group touched upon the arrangements that would be in place for compensation of disconnected firm load customers under option 3 and how these would work in practice. In particular the question was raised as to what would happen in the event that a supplier had a balanced position but their customer was forced to come off due to others being short.

3.72. Ofgem clarified that, at a high level, the supplier in question could pay a small amount of the costs of compensation while the majority would be socialised amongst the industry. It was agreed that the details of the compensation arrangements in place would be discussed in more detail at the second workshop.

Monitoring

3.73. One attendee suggested that monitoring of suppliers and their contract arrangements could be an important part of ensuring that any reform of the arrangements would work. Another attendee agreed, suggesting that the industry may consider a party to have secure contracts in place for its gas when in fact they may not be very secure. In this event, the whole industry may end up paying for the poor contracting decisions of a single party.

3.74. In this regard the work that Ofgem was performing with suppliers to discover how they procure their gas and the contracts that they have in place was brought up. The attendee asked whether it would be possible to get some feedback on how this was going.

Other options

3.75. Peter then asked the group if they had any other options which they would like to raise at the workshop.

'Do nothing'

3.76. The importance of not having a pre-determined view as to the preferred option and of keeping 'do nothing' as an option was highlighted by one attendee with the agreement of others. It was also suggested that some mix of the three options which had not yet been considered may provide the optimum solution and should not be ruled out.

3.77. Ofgem confirmed that there was no preferred option at this stage and that 'do nothing' would remain an option until a final decision was made.

Different options for different emergencies

3.78. Another attendee was keen to repeat suggestions that different options may be preferential for different types of emergencies depending upon the speed of escalation.

Demand side response

3.79. The importance of DSR in avoiding and dealing with an emergency was repeated. One attendee stated his view that this should be an essential consideration in developing revised emergency arrangements

3.80. Another attendee suggested that this could be achieved through some form of operating reserve type contract whereby shippers could be encouraged to contract into additional DSR.

Top-up regime

3.81. One attendee suggested that the SCR team review the top-up regime that was in place for the gas market previously. They asked the team to consider the regime with the objectives of the review in mind and requested that they weigh up the small advantages of moving away from the regime with the potential costs associated with the options put forward.

4. Closing remarks

4.1. Giles closed the workshop by thanking everyone for attending and reminding them of the dates for the next workshops.

Attachment 1 – list of attendees

Alison Meldrum	Tata Steel
Amrik Bal	Shell Energy Europe Ltd
Andrew Pester	Ofgem
Anna Barker	Ofgem
Anna Saksonov	Ofgem
Chris Wright	Centrica
Dora Ianora	Ofgem
Eddie Proffitt	Major Energy Users Council
Giles Stevens	Ofgem
Ian Trickle	ExxonMobil
Jacky Carroll	National Emergency Coordinator (National Grid)
Jamie Black	Ofgem
Jill Brown	RWE npower
John Costa	EDF Energy
Julie Cox	Association of Electricity Producers
Laone Roscorla	Cornwall Energy
Lewis Heather	Ofgem
Malcolm Arthur	National Grid
Mark Dalton	BG Group
Peter Sherry	Ofgem
Richard Fairholme	E.ON
Richard Street	Corona Energy
Roddy Monroe	Centrica Storage
Shelley Rouse	Statoil (UK) Ltd
Steve Gordon	Scottish Power

Apologies: Jeff Chandler, SSE

Attachment 2: Options tables

Table of Options

Element	Current arrangements	Option 1	Option 2	Option 3
Shipper-to-shipper trading	Continues	Continues	Suspended	Suspended
Cash-out price	Frozen	Dynamic	Dynamic	Frozen
Post emergency claims	Required	Not required	May be required for domestic supply	Required
Role of VoLL	None	Administrative price cap(s) at VoLL	Administrative price cap(s) at VoLL	Administrative price cap(s) at VoLL
NGG role	No market balancing actions	Market balancing actions set cash-out	Market balancing actions set cash-out; Sole purchaser of gas from non-domestic sources	Sole purchaser of gas from non-domestic sources
NEC role	Authorise firm load disconnection; Authorise instruction of maximum flows from domestic sources	Authorise firm load disconnection	Authorise firm load disconnection; Authorise instruction of maximum flows from domestic sources	Authorise firm load disconnection; Authorise instruction of maximum flows from domestic sources
Compensation for firm customers disconnected	None	Compensation at administrative VoLL(s)	Compensation at administrative VoLL(s)	Compensation at administrative VoLL(s)

Option 1 Pros and Cons

Pros	Cons
<p><i>Cash-out price unfrozen:</i> reflects supply-demand balance, able to reward delivery of both domestic and non-domestic gas appropriately</p>	<p><i>Potential for gaming:</i> can be minimised if market balancing actions of NGG set the cash-out price</p>
<p><i>Shipper-shipper trade allowed:</i> shippers can trade out their position</p>	<p><i>Current NEC role changed:</i> removal of ability to instruct maximum supplies from domestic shippers may create market power concerns</p>
<p><i>Efficient cost allocation:</i> short shippers fully responsible for imbalance</p>	<p><i>Complexities in implementation:</i> need to balance efficiency objectives with need to take potentially very expensive balancing actions in incentive arrangements for NGG</p>
<p><i>Enhanced security of supply:</i> firm disconnection only when cash-out price reaches VoLL for that customer group</p>	<p><i>Risk of financial distress high:</i> short shippers may be more at risk of financial distress during an emergency</p>
<p><i>Appropriate compensation:</i> at the appropriate VoLL for firm disconnection</p>	<p><i>Barrier to entry:</i> Potential new credit requirements may create a barrier to entry for small shippers</p>

Option 2 Pros and Cons

Pros	Cons
<i>Cash-out price unfrozen:</i> reflects marginal action taken by NGG	<i>Highly centralised:</i> NGG may have less expertise in negotiating large non-domestic purchases, exposing industry to additional costs
<i>Coordination:</i> Ability of NGG to take a system-wide view over non-domestic purchases may reduce costs	<i>Complexities in implementation:</i> may need a significant change to the incentive regime for NGG
<i>Current NEC role retained:</i> ability to instruct maximum supplies from domestic shippers	<i>Shipper-shipper trade suspended:</i> shippers are unable to trade out their imbalance position
<i>Efficient cost allocation:</i> short shippers fully responsible for imbalance position	<i>Risk of financial distress high:</i> short shippers may be more at risk of financial distress during an emergency
<i>Enhanced security of supply:</i> firm disconnection only when cash-out price reaches VoLL for that customer group	<i>Barrier to entry:</i> Potential additional credit requirements may create a barrier to entry for small shippers
<i>Appropriate compensation:</i> at the appropriate VoLL for firm disconnection	

Option 3 Pros and Cons

Pros	Cons
<p><i>Socialise costs:</i> costs of resolving the emergency are smeared across the industry, which could be considered appropriate if the market is believed to no longer be functioning</p>	<p><i>Inefficient cost allocation:</i> short shippers are not held wholly responsible for their imbalance position</p>
<p><i>Coordination:</i> Ability of NGG to take a system-wide view over non-domestic purchases may reduce costs</p>	<p><i>Cash-out price frozen:</i> potential for less transparency for shippers' liabilities with respect to their imbalance positions</p>
<p><i>Current NEC role retained:</i> ability to maximise supplies from domestic shippers</p>	<p><i>Highly centralised:</i> NGG may have less expertise in negotiating large non-domestic purchases, exposing industry to additional costs</p>
<p><i>Risk of financial distress minimised:</i> as costs are socialised there is less risk of individual shipper financial distress</p>	<p><i>Shipper-to-shipper trade suspended:</i> shippers are unable to trade out their imbalance position</p>
<p><i>Optimal security of supply:</i> firm disconnection only when cost of marginal NGG action exceeds VoLL for the relevant customer group</p>	<p><i>Complexities in implementation:</i> may need a significant change to the incentive regime for NGG</p>
<p><i>Appropriate compensation:</i> at the appropriate VoLL for firm disconnection</p>	