Title: Energy supply		Impact Assessment (IA)						
				Date: 20/03/2012				
IA No: DECC0084			:	Stage: Consultation				
				Source of intervention: Domestic				
Lead department or a	-	Type of measure: Secondary legislation						
Other departments or agencies: Insolvency Service Scotland Office, Ministry of Justice				Contact for enquiries: Dawn Armstrong dawn.armstrong@decc.gsi.gov.uk				
Summary: Inter		RPC: RPC Opinion Status						
	Cost of P	referred (or m	ore likely)	Option				
Total Net Present Value	Business Net Present Value	Net cost to business pe (EANCB in 2009	e r year	In scope of In, One-Out	One- Me ?	easure qual	lifies as	
£0.057m	£0.057m	£-0.004	•	Yes	Ze	ero Net Cos	st	
licence and appoint another supplier to take over its customer accounts. There is a significant risk they would not be effective in dealing with the insolvency of large suppliers because of the large volume of customers involved. Customers would continue to be supplied at potentially greater cost with energy bought through balancing mechanisms rather than under contract. This would put industry systems under strain, reduce stability in the market and risk contagion. The Government therefore provided for a special administration regime in the 2011 Energy Act. The Rules will complete implementation of energy supply company administration (esc administration).								
 What are the policy objectives and the intended effects? The policy objective is to put in place arrangements to ensure that if a large energy supplier became insolvent : its customers would continue to be supplied as cost effectively as possible any impacts on the industry systems, particularly in relation to balancing and settlement arising from large unpredictable transfers of costs from a failed supplier to other industry participants are minimised. market stability and customer confidence is maintained. 								
What policy options have been considered, including any alternatives to regulation? Please justify preferred option (further details in Evidence Base) In the Energy Act 2011 the Government legislated for esc administration. Should a company become financially distressed, no buyer can be found and it is not viable to appoint a Supplier of Last Resort, esc administration ensures that the company can continue to supply customers, while offering the least disruption to the market and limiting any risk of contagion. The IA that accompanied the primary legislation considered the costs and benefits of 3 options. In this IA we consider two options. We consider doing nothing. However, this would mean that the provisions in the Energy Act could not be implemented with the result that the cost of supplying a failed company's customers would be greater and more unpredictable. Our preferred option is to introduce the draft rules, which set out how esc administration will operate in practice and will complete implementation of provisions already enshrined in statute.								
Will the policy be reviewed? There are no plans to review the policy as it is a contingency measure and the likelihood that it will be called upon is low. If applicable, set review date: Month / Year								
Does implementation	go beyond minimum EU r	equirements?			N/A			
Are any of these organ exempted set out reas	Micro No	< 20 No	Small No	Medium No	Large Yes			

(Million tonnes CO2 equivalent)N/AN/AI have read the Impact Assessment and I am satisfied that, given the available evidence, it represents a
reasonable view of the likely costs, benefits and impact of the leading options.N/A

(horles tending)

What is the CO2 equivalent change in greenhouse gas emissions?

Date: 18 June 2012

Non-traded:

Traded:

Summary: Analysis & Evidence

Description:

FULL ECONOMIC ASSESSMENT

Price Base	PV Bas	se	Time Period	Net Benefit (Present Value (PV)) (£m)					
Year 2009	Year 2	2010)10 Years 20		Hi	gh: 0.114	Best	Best Estimate: 0.057	
COSTS (£m)			Total Tra	ansition	Average Annual		Total Cos		tal Cost
			(Constant Price)	Years	(excl. Transitior	(excl. Transition) (Constant Price)		(Prese	ent Value)
Low									
High									
Best Estimat	Best Estimate 0.00 0.00 0						0.00		
The IA that accompanied the primary legislation assessed the costs and benefits of esc administration assuming the rules of procedure would be introduced. The draft rules have no additional financial impact over and above those set out in the IA that accompanied the primary legislation. Government and Ofgem will experience some administrative costs if the regime were used.									
Other key non-monetised costs by 'main affected groups' There is the potential for the introduction of esc administration to result in an increased cost of capital for supply companies, however for reasons explained in the Evidence Base we do not expect this to materialise. The Balancing and Settlement Code Panel and Energy Balancing Credit Committee may have to introduce small consequential amendments to the codes governing the balancing and settlement mechanisms, for electricity and gas respectively.									
BENEFITS	(£m)		Total Tra (Constant Price)	ansition Years	Average Annual (excl. Transition) (Constant Price)		Total Benefit (Present Value		l Benefit ent Value)
Low			N/A		0		0		0
High			N/A		0.009		0.114		0.114
Best Estimat	e		N/A		0.004		0.0		0.057
Description and scale of key monetised benefits by 'main affected groups' Esc administration would lower the short run cost of supplying energy to customers of the insolvent company of approximately £1.5m. This figure has been weighted by the probability of default to present a net benefit of the introduction of esc administration of between £0 and £114k. These benefits were included in the IA accompanying the primary legislation, which assumed introduction of the rules of procedure. If the rules were not implemented, these benefits would be lost and are therefore restated (although revised) in this IA.									
Other key non-monetised benefits by 'main affected groups' In the event of such a failure, esc administration would also limit the impact of large unpredictable transfers flowing from the insolvent company to other market participants due to the provision of energy to customers of the insolvent company. The regime would also reduce the risk of contagion and market destabilisation as market and consumer confidence is maintained by the existence of esc administration.									
Key assumptions/sensitivities/risks Discount rate (%) 3.5									
The estimates reflect the price of providing energy to the customers of an average large energy supplier. The figures would vary depending on the actual size of the supplier and its customer base, the price of energy at the time of the insolvency, the market reaction and any potential risk premium, and the length of time the company was in esc administration.									
BUSINESS ASSESSMENT (Option 1)									
Direct impact on business (Equivalent Annual) £m: In scope of OIOO? Measure qualified					lifies as				
Costs: N/A Benefits:		efits: N/A	Net (benefit): 0.004		Yes		Zero Net Cost		

Yes

Evidence Base (for summary sheets)

The problem under consideration

- 1. In the Energy Act 2011 the Government legislated for a Special Administration Regime for energy supply companies esc administration. The primary legislation sets out the broad framework for esc administration. The draft rules set out the procedures to be followed.
- 2. Esc administration applies only to holders of gas and electricity supply licences. It facilitates the continuation of a failing energy supply company's activities, possibly through Government funding, until it is either rescued, sold as a going concern or its customers transferred to other companies. The intention is that any funding provided by the Government would be recovered from the company if it were rescued, or its successor(s) if it were sold. Where the company or its successor(s) are not in a position to repay some or all of the loans, there is provision to allow the Secretary of State (SoS) to modify electricity and gas licences, subject to consultation with the industry, to recover any shortfall. We will be consulting on proposals to amend companies' licences so that any shortfall can be recovered through National Grid's raising its network charges to industry participants. Esc administration will ensure continuity of supply to customers at a more reasonable cost by allowing the failing company to continue to contract to supply gas and/or electricity to customers through its usual purchasing contracts, as opposed to supplying customers through balancing and settlement arrangements. It reduces the risk of contagion and helps maintain market stability and consumer confidence. An explanation of the industry balancing and settlement arrangements at Annex 1.
- 3. Esc administration is intended to supplement the existing arrangements for dealing with the failure of a supplier. The most likely and desirable outcome, if a supplier were to become financially distressed, would be a trade sale. If this were not possible, Ofgem would consider whether it would be practicable to appoint a Supplier of Last Resort. Only if these two options were not viable would the Government seek an esc administration order. It is likely that in most cases Ofgem would be able to appoint a Supplier of Last Resort and that esc administration would be needed only in the event of a large supplier becoming insolvent.
- 4. Briefly the draft rules cover:
- The process the Secretary of State or Ofgem must follow when making an application to the court for esc administration;
- The steps to be followed in esc administration proceedings, including the notification and advertisement of the energy administrator's appointment and the preparation of a statement of the energy supply company's affairs and the information that must be given to creditors.
- How the energy administrator must conduct creditors and company meetings.
- Provisions governing distributions to creditors, including the procedure to be followed to prove a debt.
- Details of how the remuneration the energy administrator will be fixed by the court.
- 5. The arrangements for ending esc administration. The draft rules are based on the Insolvency Rules 1986, which are well known to insolvency practitioners. They differ only where it is necessary to reflect arrangements that are specific to esc administration. For instance one significant difference is that the energy administrator could not move to wind up the company until all customers had been transferred to a new supplier.
- 6. This section examines the problem and the rationale for intervention and then examines the costs and benefits associated with esc administration. It draws heavily on the analysis in the IA, Introduction of a Special Administration Regime for Electricity and Gas Supply Companies. We do not consider there to be any additional impacts arising from the draft rules.
- 7. Current arrangements to deal with the insolvency of a gas and electricity supply company allow Ofgem to revoke the supplier's licence and appoint another supplier (a Supplier of Last Resort, or SoLR) to take over its customer accounts. This process usually takes between 24 and 48 hours. The arrangements have been tested several times over the last few years when small suppliers have failed. Although they have worked well, experience has shown that it is unlikely that they would be effective in the event of a large supplier becoming insolvent. There are two main reasons for this:

- 1) For a supplier to take on the customers of one of the six largest supply companies may mean doubling the size of their customer base. A transfer of this size could not take place in an orderly manner in a short timescale.
- 2) Ofgem can only direct a supplier to be a Supplier of Last Resort if that would not prejudice its ability to supply its existing customers. Ofgem may therefore be in a position where it cannot appoint a Supplier of Last Resort.
- 8. In addition, if it were practicable for a company to be appointed a Supplier of Last Resort any transfer of a large supplier's customers to another large supplier may be subject to agreement from the competition authorities, which could take several months.
- 9. Dividing up a company's portfolio of customers and transferring them to more than one supplier would be a difficult and time consuming task. It may be possible to transfer all gas customers to one supplier and all the electricity customers to another, relatively quickly, if another supplier has the capacity to take on that volume of customers. This would depend on whether they could raise the necessary finance and put in place the necessary contracts. Once a supplier agrees to become a Supplier of Last Resort they are then responsible for the balancing and settlement charges.
- 10. Dividing the customer portfolio further would need to be done through the usual customer registration process when a customer switches supplier. This process currently deals with 3.6 million gas and 4.6 million electricity account switches each year and is designed to cope with a maximum of 20,000 electricity customers and 50,000 gas customers changing supplier each day. If a large supplier became insolvent then the system would have to cope with between 5m and 16m customer account transfers.

Rationale for intervention

- 11. In the very unlikely event of the failure of a large energy supplier, it is unlikely that it would be practicable to appoint a Supplier or Suppliers of Last Resort. However, the company's customers would still continue to be supplied even if the supplier's contracts with generators and wholesale gas suppliers had been cancelled, as National Grid would continue to balance the system. This would create additional costs in the short term and large transfers of liabilities from the insolvent company to other industry participants in the medium to long run. This would put a considerable strain on the system, risking contagion and reducing consumer and market confidence.
- 12. Esc administration allows the Government to fund the company, so it can continue to supply customers through its usual contracting arrangements with generators and wholesale gas suppliers. It should therefore diminish the overall uncertainty and risk and reduce the risk of contagion. Esc administration is essentially an insurance policy in case of a low probability, high impact event that could potentially destabilise the GB energy market.

The policy objective

- 13. The policy objective is to put in place arrangements to ensure that if a large energy supplier became insolvent :
- its customers would continue to be supplied as cost effectively as possible
- large, unpredictable transfers of costs from a failed supplier to other industry participants are avoided
- any impact on the industry systems, particularly balancing and settlement, are minimised
- market stability and customer confidence is maintained.
 - 14. Esc administration achieves these objectives by providing a mechanism through which the Government can fund a failing company's activities until it is either rescued, sold as a going concern or its customers transferred to two or more companies. The intention is to recover the Government funding from the insolvent company if it were rescued or from the proceeds of its sale if it were sold. If all or part of the funding could not be recovered from the company or its successor(s), the intention is to recover it through network charges.

Options considered

- 15. We considered 3 options in the IA that accompanied the primary legislation. Since then provisions for esc administration have been included in the Energy Act 2011. In this IA we consider two options:
- 1)Do nothing.
- 2) Introduce rules of procedure to complete implementation of esc administration (preferred option).
- 16. In the event of a large supplier failure, these options would have different results. It should be noted that in the event of a small supplier failing it is assumed that existing industry mechanisms would be enforced ie a small supplier may be sold though a trade sale, or if that were not possible, Ofgem would revoke its licence and appoint a Supplier of Last Resort.

Do nothing

- 17. If we did not introduce the rules, it may not be possible for a failing company to enter into esc administration and the supplier would be subject to ordinary insolvency procedures. If the company entered into ordinary administration we assume that all or some of its purchasing contracts would be cancelled. In the supplier insolvencies that have occurred so far and that have resulted in the Supplier of Last Resort process being invoked, purchasing contracts have been cancelled. This was also the case when a large non physical trader (ie a company that buys and sells energy on the energy exchange) went into administration. Companies that had contracts agreed began to pull out rapidly and therefore we have assumed that all or some of the failing company's contracts would be cancelled.
- 18. If the administrator agreed to pay the balancing and settlement charges, Ofgem would not revoke its supply licence. Whether or not the administrator could secure finance would depend on whether existing lenders believed they had a better chance of recovering some or all of their investment by extending the loans. Assuming the administrator is not in a position to pay the balancing charges, Ofgem would then seek to appoint a Supplier of Last Resort or Suppliers of Last Resort to take on the customers of the failed supplier. A conservative estimate suggests the customer bases of the six largest suppliers range from 3.3 million customers for the smallest to 9.8 million customers ¹for the largest. Given the large number of customer accounts involved this is unlikely to take place quickly.
- 19. For a smooth transfer of customers from one supplier to another, the Market Participant ID (for electricity) and the Shipper Short Code (for gas) needs to be transferred from one supplier to another. If no suppliers are in a position to take on all of a company's gas customers or its electricity customers, then the customers would have to be transferred to a number of companies. These transfers would have to take place via the change of supplier process. This process generally handles 3.6 million gas and 4.6 million electricity account transfers a year and is designed to allow up to 20,000 electricity customers and 50,000 gas customers to transfer each day.
- 20. As large suppliers have the vast majority of their domestic customers registered under one Market Participant ID and Shipper Short Code, this means customer portfolios cannot be split. Therefore the majority of domestic customers would have to be transferred via the customer transfer route. As customer registration on this scale has never been attempted we have been unable to estimate the length of time it would take. During this time the company's customers would continue to be supplied through the balancing mechanisms at a large cost to other market participants. As demonstrated later this would place a significant strain on the system with a serious risk of contagion effects.
- 21. It would be feasible under the Supplier of Last Resort Process to transfer quickly all gas customers to one supplier and all electricity customers to another. However, we believe there would be a significant impact on competition, which is likely to require a 45-day merger

¹ Customer numbers refers to the total number of customers supplied. It includes dual fuel customers as a single customer . A dual fuel customer represents 2 accounts .

investigation by the OFT. This is likely to result in a further referral to the Competition Commission. A Competition Commission inquiry would take 6 months.

- 22. In addition, if Ofgem were unable to appoint a Supplier of Last Resort, under ordinary administration law if an administrator believed costs were spiralling out of control, he/she could seek to liquidate the company and the liquidator could disclaim the contracts it had with customers if they were considered onerous. This would leave customers being supplied, but not being billed as they would no longer have a contract with a supplier. As the balancing and settlement arrangements require that unpaid balancing charges are smeared across parties to the balancing and settlement codes, these costs would ultimately be borne by other consumers.
- 23. As discussed earlier, we believe it is unlikely that Ofgem would be able to appoint a Supplier or Suppliers of Last Resort if a large supplier were to become insolvent.

Legislate to introduce rules of procedure

- 24. Our preferred option is to legislate to introduce the rules of procedure. This is our preferred option because it would allow a failing company to enter esc administration. It could continue to supply customers as cost effectively as possible, thus avoiding large unpredictable transfers of costs to other market participants. This option offers the least disruption to gas and electricity market arrangements.
- 25. Once esc administration is in place, should a company fail and in the event that Ofgem advised it is not viable to appoint a Supplier of Last Resort, the SoS could apply to the court for an esc administration order. The energy administrator's primary objective would be to maintain supply to customers as cost effectively as is reasonably practicable in the circumstances. It would therefore not be necessary to use the balancing mechanism outside usual use. The court could grant the esc administration order subject to the company meeting the statutory tests for insolvency.
- 26. The Government would then be able to provide grants or loans, as well as underwriting any loans taken out by the energy administrator in order to maintain electricity and gas supply. The SoS would be able to stipulate when the loans are repaid and the rate of interest.

Costs and benefits

- 27. This section examines the costs and benefits of esc administration as fully implemented, as it is not possible to apportion the costs and benefits between the primary and secondary legislation.
- Benefits of Energy Supply Company Administration
- 28. The main benefits of a esc administration will be realised only in the event of a large supplier insolvency. However, the benefits are potentially large. They will come from three main sources: a lower short run cost of balancing compared to the current regime, reduced impact of liability transfers from the insolvent supplier to other industry participants and limited contagion effects compared to the current regime. In order to examine the overall net benefit of esc administration in the event of a large supplier insolvency we also examined the additional costs of esc administration in the event of an insolvency to estimate the overall probability-weighted net benefit. These are discussed below:
- 1. Lower Short Run Balancing Costs
- 29. Under the current arrangements, if a large supplier were to go into administration, some or all of their contracts would be cancelled. As the customers would continue to draw electricity and gas from the respective networks we would expect National Grid to use the balancing mechanisms to supply customers. We would expect this to have minimal additional effect on the gas network. However, as electricity cannot be stored and is balanced at half-hourly intervals we would expect electricity balancing prices to rise in the very short term. We would then expect prices to fall quickly as spare generation (as a result of the cancelled contracts) becomes available. However,

there is a risk that generators may increase their prices at a time of market uncertainty. It is also important to note that imbalance charges can be volatile² and can rise and fall depending on conditions affecting demand and supply in the wholesale gas and electricity markets and the actions of other market participants.

- 30. This effect is demonstrated in an example of when a small electricity supplier became insolvent. This company of 40,000 customers accrued around £4.9m in balancing charges for approximately 172GWh, during the period between going into administration and another supplier taking over the customers – a period of less than 48 hours. We would not necessarily expect these costs to be replicated on a larger scale if one of the large suppliers became insolvent. The cost would depend on:
- the number of customers supplied;
- volume of gas and electricity supplied;
- the time of year;
- prevailing weather;
- availability of power;
- the extent to which the company generates its own electricity and trades in gas;
- the extent to which its generating and trading arms would continue to supply the retail arm.
- 31. Conservative estimates suggest the customer bases of the six largest electricity and gas suppliers range from around 3.3 million customers for the smallest to 9.8 million customers for the largest. Of these companies, two have the capacity to generate sufficient electricity to supply all its customers. The other four have the capacity to generate between 51% and 66% of the electricity they supply.
- 32. None of these companies maximise self-supply and in the event of an insolvency there is no guarantee that the generation arm would continue to supply the retail company if it were not honouring its contracts. For this impact assessment we have assumed companies do not self-supply in the event of insolvency.
- 33. We have assumed that the balancing costs would remain high for a period of up to 24 hours, before falling to market prices as generators attempt to sell their electricity. However, it is difficult to predict how generators would react and it may take longer for prices to settle. We have used an approximation of average daily demand figures to estimate the daily cost of providing electricity through the balancing mechanism for an average sized large supplier. Using the average System Buy Price for a three month period over winter 08/09³ (when prices were high) we expect the cost of balancing for a 24 hour period would average £12.1m. This would be at a £1.5m additional premium (see diagram) over the usual market price (using day-ahead prices for the same time period). We interpret this difference in the price as a difference in cost to society: for example, due to National Grid (temporarily) having to call on less efficient generation than was originally contracted for. This figure is an average, it could be larger or smaller depending on the size of company and energy prices. Furthermore, imbalance charges can be volatile and can rise and fall depending on conditions affecting demand and supply in the wholesale gas and electricity markets and the actions of other market participants.
- 34. There may also be an additional risk premium charged by the market in the event of the insolvency of a large supplier in the short and possibly medium-term. We have not been able to estimate the size of this effect.

 $^{^2}$ To illustrate this, the standard deviation of the half-hourly System Buy Price (SBP, the main imbalance price when the system is short) calculated by Elexon, over the period 31 July 2005 to 19 December 2010, was approximately £41/MWh. Over the same period, the standard deviation of the half-hourly prices on the continuous spot market of, APX (an electricity exchange) was £27/MWh.

 $^{^{3}}$ For this impact assessment we have assumed that the insolvency has occurred in a winter as the system is more likely to be under strain at this time, and it has been suggested that an insolvency is more likely to occur at times of system stress. In order to provide reference prices we have chosen a winter when prices were relatively high, ie Winter 08/09, as we believe this better simulates a situation when the system is under some level of stress.

35. This additional cost would not occur if a large supplier became insolvent with esc administration in place as the company would not require use of the balancing mechanism over and above usual operations and therefore is a net benefit of an esc administration (see Figure 1).





- 2. Reducing the impact of transfers of costs from the insolvent supplier to other industry participants
- 36. Under both ordinary administration (and in the event of the administrator not being able to secure private finance enabling it to purchase energy supplies) and esc administration (and in the event of the company not being in a position to repay some or all of the loans made by Government), there would be transfers of costs between the insolvent supplier and other industry participants. However, esc administration reduces the impact of transfers between the insolvent supplier and other industry participants, through:
- a likely reduction in the level of transfers, by potentially increasing the exposure of the company's investors to the costs of supplying customers with electricity and gas, and by reducing the costs of supplying customers with electricity (see section above); and
- greater predictability of the flow of any resulting transfers.
- 37. In the following paragraphs, we explain this in more detail.
- 38. Under the current arrangements, should a large energy supplier become insolvent, and should the administrator be unable to secure finance to purchase energy supplies, the cost of providing electricity and gas to customers of the insolvent company would be met by other industry participants. The liability for supplying customers of the insolvent company is transferred from the insolvent supplier to other industry participants, and ultimately customers of other suppliers. To help demonstrate the importance of this issue, we provide an illustration below of the scale of the absolute value of transfers.
- 39. We have used daily demand of an average large supplier to estimate the ongoing daily cost of supplying electricity and gas to consumers at market prices. In the event of the failure of a large supplier, we have assumed the balancing markets would be used to purchase all electricity and gas for that supplier's customers. Balancing prices would therefore quickly (we are estimating within 24 hours) become similar or equivalent to spot prices. We have taken a period of relatively high wholesale prices, as it is likely that if a large supplier were to have financial difficulties it

would be at a time when the market as a whole is under pressure. Using the average day-ahead price from three months in winter 08/09, we have estimated that the daily cost of providing energy (electricity and gas) to customers could be around £19.6m per day for an average large energy supplier. The actual figure could be smaller or larger depending on the size of the company and the price of energy. This would first of all be recovered from the security held with each of the balancing services, however, then costs would be passed through to the parties to the Balancing and Settlement Code for electricity (generators, suppliers and non physical traders) and Uniform Network Code for gas (shippers and non physical traders).

- 40. As these costs would have normally been paid by the insolvent supply company (who we assume is still billing customers) these costs are not additional. However, they do represent a significant unpredictable transfer in liability from the insolvent company to other industry participants. It is important to note that, while uncertainty of imbalance prices itself may not be a problem, this risk cannot be "hedged" by market participants financially, since imbalance prices are calculated by Elexon and xoserve, and are not known with certainty until sometime after the event.
- 41. We are unable to estimate how long a company may be in administration, and therefore the combined size of these transfers. Under ordinary administration rules a company may remain in administration for up to a year, however we would expect the true period to be shorter, as esc administration would cease once all customers were transferred to other suppliers. To illustrate the potential size of the costs, if an average large supplier were in administration for a 3 month period during the winter, the cost of providing energy over that time would be approximately £1.8bn. This would represent the size of the transfer of liability from the insolvent company to other market participants who would be required to pay for the energy supplied to customers of the insolvent company for the length of the administration. For a 6 month administration the total liability transfers would be approximately £2.3bn (this figure assumes that for the second three months, the price of energy is lower due to seasonal changes). The transfers could be greater depending on how long the company were in esc administration, the size of the company's customer base and the price of energy.
- 42. These transfers could potentially be much larger once distribution and transmission charges are taken into account. Distribution companies can recover bad debt through their charges to suppliers. They must receive Ofgem's consent to initiate this recovery process. We have assumed that Ofgem would give consent. In the case of one example of a small supplier that became insolvent, the company ended up owing electricity distribution charges of £2.5m which represented 34% of the total charges accrued by the supplier during the 48 hours period before a Supplier of Last Resort was appointed. To estimate the cost on a distributor we have applied the same percentage to the cost transfers. For a 3-month administration the transfer of liability from creditors of the insolvent company to distribution companies could be £612m, and for a 6-month administration the liability transfers could total £782m. Please note, these figures are illustrative as we are unsure how the cost would vary for gas distributors and have used the electricity distribution as an approximation.
- 43. Under esc administration, the Government is able to provide grants or loans (or to underwrite any loans taken out by the energy administrator in order to maintain electricity and gas supply). Should the company not be in a position to repay some or all of the loans, there is provision to allow the SoS to modify electricity and gas licences, subject to consultation with the industry, to recover any shortfall. We intend to consult separately on proposals to amend companies' licences so that any shortfall can be recovered through National Grid's network charges to industry participants. As under the current arrangements (see paragraph above), these costs would ultimately be borne by customers of other suppliers.
- 44. However, the value of transfers would likely be lower, relative to ordinary administration. Esc administration would allow the failing company to continue to contract to supply gas and/or electricity to customers through the usual purchasing contract mechanism. Government has first claim (ahead of other creditors) on any company assets in the event that some or all of its loans are not repaid. Relative to ordinary administration, where the company could choose to supply customers through balancing and settlement arrangements, the company (and, by extension, its investors) is likely therefore to bear a greater share of the costs of supplying its customers with energy.

- 45. In addition, the company could buy energy more cheaply than National Grid would under ordinary administration. The transfers under esc administration would thus also be lower, to the extent that:
- short-run balancing costs are avoided; and
- under ordinary administration, there is likely to be an additional risk premium charged by generators.
- 46. Under esc administration, transfers would also be predictable as the full extent of any shortfall could be recovered gradually, placing less strain on industry participants.

3. Contagion Effects

- 47. The third benefit of esc administration is that it will limit contagion effects in the event of insolvency. As described above, in the event of a large supplier insolvency there will be large unexpected cost transfers from the insolvent company to other market participants. This will cause cash flow problems for other market participants, putting a strain on the system and threatening the stability of other market participants.
- 48. An insolvency of a large supplier may destabilise the market, with potential contagion risks. We have been unable to estimate the potential size of these effects. However, they could be large. We consulted both the Balancing and Settlement Code (BSC) Panel and the Energy Balancing Credit Committee (EBCC) on the draft impact assessment for the primary legislation. The EBCC commented on the importance of the Secretary of State being able to act promptly in order to minimise the impact of the company's failure on other market participants.
- 49. Under esc administration, there would be limited and orderly transfers and therefore the contagion risks would be minimal. This is a net benefit.
- 4. Probability Weighted Net Benefit
- 50. In order to examine the overall net benefit of esc administration in the event of a large supplier insolvency we need to examine what potential cost saving it offers compared to the current regime. This allows us to estimate the overall probability-weighted net benefit.
- 51. Under esc administration the SoS may apply to the court for an esc administration order. The objective of the energy administrator is to maintain supply to customers as cost effectively as is reasonably practicable in the circumstances. He/she is also required to act in the best interests of creditors and shareholders in so far as it is compatible with the duty to maintain supply.
- 52. The Government faces the administrative cost of applying to the court for an esc administration order and the administrative costs of setting up and recovering the loans. The SoS can stipulate when loans are repaid and the rate of interest. We assume that the rate of interest is set in order to recover the administrative costs to Government of setting up the loans. If the company is not in a position to repay some or all of the loans, there is provision to allow the SoS to modify electricity and gas licences, subject to consultation with the industry, to recover any shortfall. We are currently consulting separately on proposals to amend companies' licences so that any shortfall will be recovered through National Grid's network charges to industry participants. We assume therefore that the cost of the loan to the state would be zero. However, there may be some additional costs to government and Ofgem associated with time and resources taken to negotiate with the energy administrator and put in place loans quickly.
- 53. The cost of an energy administrator is paid out of the funds realised throughout the process. An energy administrator would operate along similar lines to an ordinary administrator and therefore it is assumed that there would be no difference in costs associated with the expenses of an energy administrator to those incurred by an ordinary administrator of a similar sized energy company.

- 54. In order to estimate the true net benefit of esc administration we need to account for the probability of a large energy supplier becoming insolvent. Ratings from S&P indicate that all of the six large energy supply companies (or their parents) have credit ratings that would classify them as "investment grade". According to S&P's most recent default study, the historical annual default rates of investment grade companies range from 0% to 2.6% over 1988 to 2010, with a weighted average of 0.56%. However, the risk of needing to apply for an esc administration order would be even smaller as the most likely outcome of a supplier in financial distress would be a trade sale and if this were not achieved, it may be possible in certain circumstances for Ofgem to appoint a Supplier of Last Resort.
- 55. So we assume a zero net benefit as a lower bound (i.e. even in the event of a large supplier insolvency, esc administration does not come into play since there is a trade sale). As an upper bound, we assume every time a supplier becomes insolvent, esc administration comes into play. This upper bound of net benefits is calculated as in the table below.

Year	2013	2014	2015	2016	 2032	Note
Default Probability	0.56%	0.56%	0.56%	0.56%	 0.56%	A (weighted average annual default)
Net benefit in event of default (£m)	1.5	1.5	1.5	1.5	 1.5	B (lower short-run balancing costs, see para d)
Probability weighted net benefit (£m)	0.009	0.009	0.009	0.009	 0.009	=A*B
Net present value (£m, NPV base year 2010)						0.114

- 56. So, the net benefit of these measures would range between £0 and £114k, with a mid-point estimate of £57k. The figures would vary depending on the demands of the insolvent company and the price of energy.
- 57. This figure includes only the additional benefits (due to not using the balancing system). The figure does not include the possible benefits due to limited contagion effects which we would expect to be large. To illustrate this, we might assume that the contagion effects were equal to the transfer payments for energy provided. For a three-month administration (which we believe would be a conservative estimate due to the complexity of the situation), this would give a probability weighted net benefit of between £3.6m and £387m, and for a six month administration the probability weighted net benefit could be between £4.6m and £370m. The estimates also assume that a trade sale of the failing company would not be possible, and that Ofgem would be unable to appoint a Supplier of Last Resort. While this may overstate the magnitude of benefits of esc administration, there will still be net benefits to business from it. (discussed below).
- Costs of Introducing Energy Supply Company Administration
- 58. Having illustrated how esc administration could potentially be cost-saving in the event of a large supplier insolvency, we now examine the costs of introducing it. There are predominantly two types of cost: direct costs include the costs of putting the regime in place and indirect costs include the effect of the policy on the cost of capital, moral hazard issues and impact on creditors. These are examined below.

The IA accompanying the primary legislation assessed the costs of setting up the esc regime, of around £70k. These would primarily fall on Government and Ofgem, in the form of officials' and parliamentary counsel's time in defining and drafting the enabling powers required to set up the regime and the rules to implement the regime. We do not include these costs in this IA since they would also be incurred in the event the rules were not implemented.

- 1. Indirect costs costs of capital
- 59. While the introduction of esc administration may affect costs of capital, we have seen no strong evidence to suggest that there would be an increase in costs of capital. Indeed, esc administration is intended to reduce overall risks to creditors, through lowering the risk of contagion (see above). We discuss this in more detail below.
- 60. When we first considered introducing esc administration we investigated with the large supply companies whether there was likely to be any impact on the cost of capital. In addition we sought comments on the draft impact assessment from all of the large suppliers, to whom the SAR would mainly apply. Of the six, five did not express any concerns over cost of capital, when given the opportunity to comment. One large supplier suggested that esc administration could bring comfort to investors. The other four large suppliers did not submit any evidence, or provide comments on the draft IA in relation to the risk that the cost of capital could increase as a result of the introduction of esc administration. Only one company has raised a potential concern which we address below and feel can be adequately mitigated
- 61. The company suggested that investors may be concerned about extending special administration to supply companies because there may be a perception that the powers could be used to remove a company from its owners.
- 62. The court may make an esc administration order only if the company meets one of the statutory tests for insolvency as set out in the Insolvency Act 1986. One of these tests is that a company is "likely to be unable to pay its debts". The company suggested that this criterion may make investors nervous. However, it is the same test that the court applies when considering applications for ordinary administration, which can be made by creditors. In addition, the draft rules allow company directors to contest in court any application for esc administration.
- 63. It should be noted that other activities, such as electricity generation, would not be caught by esc administration and the large energy companies operate their licensable activities within separate company structures.

2. Indirect Costs - Moral hazard Issues

- 64. It could be argued that esc administration will encourage excessive risk taking. This is because esc administration may offer a better outcome for shareholders than ordinary administration (although this is uncertain, as we discuss below).
- 65. Apart from the primary objective of continuing to supply customers, the hierarchy of outcomes that the energy administrator must strive for is the same as that set out under ordinary administration. The energy administrator must first try to rescue the company, if this is not possible to sell it as a going concern, and if this is not possible to transfer its assets to two or more companies.
- 66. However, under ordinary administration, unless the administrator agrees to continue to pay balancing charges, Ofgem will revoke the supplier's licence and appoint another supplier to take over the company's customers, for which the company in administration will receive no payment. The likelihood of rescue is therefore less than under esc administration.
- 67. That said the outcome for shareholders is still uncertain and the extent to which their investment is protected would depend on whether the company was either rescued, sold or its assets transferred and the expenses of energy administration. We therefore do not think the introduction of esc administration would lead to excessive risk taking.
- 68. It will also be mitigated by the fact that the Supplier of Last Resort process would still be the first option that Ofgem would consider before the Secretary of State applied for an esc administration

order and by the fact that the Supplier of Last Resort process could be invoked during esc administration, with the result that esc administration could be terminated by a transfer of customers to other companies for which the company in esc administration will receive no payment.

69. It could also be argued that if a company were in difficulty, its directors may be tempted to accelerate its failure knowing that it will be underwritten by the Government. However, the draft rules allow for investigations into the conduct of directors as with ordinary administration.

3. Indirect cost - impact on creditors

70. Esc administration places the right of consumers to continue to be supplied with gas and electricity above the rights of creditors. This constrains the ability of the energy administrator to achieve the best value for creditors to the failing company. However, we believe creditors of other companies will benefit from esc administration, since, as discussed above, the risk of contagion is reduced.

Summary of Costs and Benefits

- 71. The principal costs associated with this proposal are the costs of putting in place the regime, which is borne by Government and Ofgem.
- 72. The net benefit of these measures would range between £0 and £114k, with a mid-point estimate of £57k. This figure only includes the additional benefits (due to not using the balancing system) and is weighted to account for the probability of a large supplier becoming insolvent in the next 20 years. The figure does not include the possible benefits due to limited contagion effects, which we would expect to be large but we cannot robustly quantify. The benefits could be considerably larger depending on the length of time that the company is in esc administration, the price of energy and the size and energy demands of the insolvent company's customer base.

Risks and assumptions

- 73. Key risks and assumptions are discussed in the 'costs and benefits' section. We have had to make several assumptions in order to estimate the net benefit of these measures. The estimates reflect the price of providing energy to the customers of an average large energy supplier. The figures would vary depending on the actual size of the supplier and its customer base, the price of energy at the time of the insolvency, the extent to which the company self-supplies, the market reaction and any potential risk premium and the length of time the company was in administration.
- 74. The estimates reflect the price of providing energy to the customers of an average large energy supplier. The figures would vary depending on the actual size of the supplier and its customer base, the price of energy at the time of the insolvency, the market reaction and any potential risk premium, and the length of time the company was in administration. The estimates also assume that a trade sale of the failing company would not be possible, and that Ofgem would be unable to appoint a Supplier of Last Resort.
- 75. The main risk of the proposed option is that it will have an effect on the cost of capital. However, as discussed above, we believe that this will be minimal.

Costs to Business

76. This proposal imposes one small additional administrative cost on energy supply companies should they become insolvent. The primary legislation requires that the businesses notify the Secretary of State and Ofgem if they are seeking to place the company into ordinary administration or wind it up. This notification requirement will also apply to floating charge holders and creditors that apply to the court for an ordinary administration order. We expect these costs to be negligible.

77. When fully implemented (i.e. following the implementation of the draft rules), esc administration should deliver a net direct benefit to business equal to the reduction in short-run cost of supplying energy. As shown above, compared to ordinary administration, the increased costs to the failing business (from having to purchase energy) are more than offset by the reduced costs to National Grid of buying energy through the balancing mechanisms. The EANCB of a SAR over 20 years is approximately £-0.004m. We believe this policy should therefore be rated as a Zero Net Cost IN. As discussed, we have seen no strong evidence to suggest that there would be an increase in costs of capital.

Wider Impacts

78. There will be some impact on the court from the introduction of esc administration. However, we expect this to be minimal, as esc administration is a contingency measure, which would be used as an alternative to ordinary administration.

Summary and preferred options with description of implementation plan

79. The preferred option is to introduce the rules in order to implement fully the provisions in the Energy Act 2011 for esc administration.

Annex 1

The arrangements by which the electricity industry manages electricity balancing and settlement are governed by a Code (The Balancing and Settlement Code or BSC). Suppliers are obliged by a licence condition to be a party to the code and comply with it. The energy balancing aspect allows parties to make submissions to National Grid to either buy or sell electricity into/out of the market in order to keep the system balanced. The settlement aspect relates to monitoring and metering the actual positions of generators and suppliers (and interconnectors) against their contracted positions and settling imbalances when actual delivery or offtake does not match contractual positions.

Supply must always match demand as electricity cannot be stored. Although the generation, transportation, delivery and usage of electricity is continuous, for the purposes of trading and settlement electricity is considered to be generated, transported, delivered and used in half-hour chunks called Settlement Periods. For each half-hour, those with demand for electricity and/or those with customers with demand for electricity (e.g. Suppliers) will assess in advance what the demand will be. They will then contract with generator(s) for that volume of electricity. Contracts can be struck up to an hour before the Settlement Period which the contract is for (this cut-off is known as Gate Closure and contracts can't be notified after this time). In the half hour itself, generators are expected to generate and deliver their contracted volume of electricity and suppliers are expected to use their contracted volume of electricity. Afterwards, metered volumes are collected for the half hour from generators and suppliers, and compared against their contracted volumes. If a supplier has used more electricity than they contract for, they must buy more electricity from the grid to meet the amount used. If they haven't used all their contracted energy then they must sell the energy back to the grid. These prices reflect the balancing actions National Grid have had to take and are designed to incentivise suppliers and generators to balance. The 'buy' price will usually be more expensive than the market price of electricity; and the sell price will normally be below market price.

These differences are referred to as imbalances, and settlement is the process of calculating the volumes of imbalance and the prices to be paid for these imbalances. As more accurate data comes into Settlement, Elexon, the company responsible for running the balancing and settlement mechanism, repeats the calculations on four occasions, spaced across 14 months for each half-hour period, providing a more accurate picture of Settlement each time. If a company is unable to pay its settlement costs, this cost is borne by all the parties to the code in proportion to their contracted volumes.

If a supplier goes into administration it is likely that its energy purchasing contracts will have been cancelled. However, electricity would continue to flow to customers. The company would be obliged by the BSC to purchase electricity through the balancing mechanism. The company does not contract to buy electricity, but is given a bill after Elexon have carried out their imbalance calculations, which show the discrepancies between what companies forecast they would supply and what they actually supplied. In the case of an insolvent supplier all of whose purchasing contracts have been cancelled, this would be all the electricity used by their portfolio of customers they since their contracts had been cancelled. As the system is designed to incentivise suppliers and generators to forecast their generation and supply needs as accurately as possible, the cost of buying electricity through balancing is usually considerably higher than "normal" contract prices. Usually around 3% of electricity is purchased through balancing and it is generally used to make up unanticipated additional demand. Where a settlement bill is unpaid, Elexon will ultimately smear those charges across other participants to the Balancing and Settlement Code.

As gas can be stored, demand and supply does not have to be balanced on a second by second basis. Gas supply and demand is balanced over a 24 hour period. Shippers are responsible for balancing demand and supply and are therefore signatories to the Uniform Network Code. It is shippers, not suppliers, that incur financial penalties if they do not buy and sell the gas for which they have contracted. Suppliers are not party to Uniform Network Code. However, in many cases (and certainly in the case of large suppliers), the Shipper and the Supplier are the same company and hold both licences. There is a requirement in the gas Supply licence for establishing an agreement that if a Shipper is unable to pay its debts, then the Supplier is responsible for payment.