

Principles of Clustering, Sharing of Final Sums and Termination **March 2006**

Introduction

This document sets out the main principles behind a connection or use of system offer to a User. It explains the key areas of GB access arrangements as initially described in "Proposal for Managing Access to the GB Transmission System for Existing Users and Existing Applicants under the British Electricity Trading and Transmission Arrangements (BETTA): Conclusion Document" issued in July 2005 ("The Consultation", see National Grid website <http://www.nationalgrid.com/uk/Electricity/gbagreements/>).

During 2005/6 National Grid (with support from the Scottish Transmission Owners where appropriate) issued over 150 connection offers to Users in England, Wales and Scotland. Furthermore, National Grid has run a series of User seminars (August 2005 and most recently in February 2006) where a number of issues and concerns were raised by Users.

The main concerns were related to further understanding of:

1. Clustering: the process of identifying reinforcements which impact on more than one User where consideration is given to groups of generation not individuals;
2. Final Sums: the calculation of securities required for Users for their own works and for works that they will share with other Users; and
3. Termination: the assignment of liabilities to Users for their own works and works that they will share with other Users when one or more Users terminate their Construction Agreements.

This principles document explains each of these key areas and with the use of a number of examples that depict typical scenarios.

This document sets out the processes and principles used by the GBSO and Transmission Licensees in designing the transmission system to accommodate this new generation and to allocate financial liability for these works across the parties triggering them.

The document first describes the principles behind Clustering, Final Sums and Termination. A number of examples are then used to illustrate the principles, followed by a set of frequently asked Questions and Answers.

It should be noted that in the event of any conflict between this document and the contents of Users' bilateral agreements, the CUSC, Grid Code or National Grid's Transmission Licence then those documents will take precedence over this principles statement.

Background

The transition to BETTA, in combination with government renewable generation targets and financial incentives, has led to a large number of generation applications in Scotland and England & Wales. In many cases, the capacity of these projects far exceeds the existing transmission system capacity and is therefore triggering significant system reinforcement.

Furthermore the existing system capacity is already nearly full in Scotland, northern England and the Thames Estuary. Additionally, where new sites are being sought for projects away from the existing generation sites, then entirely new transmission infrastructure must be established. As a result it is likely that most projects will require some significant transmission reinforcements to be completed before the project can connect.

Key principles

The following principles underpin the processes described in this document and are:

- Invest and connect: before a project can connect the necessary reinforcements need to be completed;
- Final Sums: These are the abortive costs incurred in reinforcing the transmission system that arise when works are no longer required when the User's agreement is terminated;
- Liability for Final Sums: Users will be financially liable for the cost of the transmission reinforcements that they individually or jointly trigger. These works are set out in the Construction Agreement (Appendix H);
- Estimate of liability for Final Sums: National Grid provides estimates of the Final Sums liability on a 6 monthly basis;
- Termination: in the event that a User's agreement is terminated, the cost of the abortive work will be determined. This may be higher or lower than the estimate of Final Sums provided; and
- Security: where the User does not meet the Credit requirements specified in CUSC, they will be required to provide financial security against the estimate of Final Sums.

1. Principles behind Clustering

1. The use of "Clustering" as a mechanism for efficiently designing transmission reinforcements and the process employed for calculating shared liabilities are separate and distinct from each other.
2. Clustering is a mechanism that has been adopted to identify and achieve efficient and economic developments to the transmission system to accommodate new customers and maintain compliance with the GB Security and Quality of Supply Standards (GBSQSS). **It can only be adopted where a number of applications for connection to the transmission system are being assessed at the same time.** This has recently been the case in Scotland as a result of the large number of applications and the transition to BETTA (which led to the creation of the GB Queue). In future it is unlikely that it will be possible (other than in exceptional circumstances) to use the clustering approach, as it is anticipated that the GBSO will not receive multiple applications at the same for the same geographic area.

What is Clustering?

3. When a new generating station applies to connect to or make use of the GB Transmission System, reinforcement of the system may be necessary to accommodate their requirements and maintain compliance with the GBSQSS. Where such an application is received and there are other applications being assessed at the same time for the same geographic area, then the clustering approach can be used. The requirements to accommodate all these Users are then considered together, rather than incrementally for each applicant. This helps to identify the optimum overall solution in terms of the system reinforcement.
4. This approach is particularly appropriate in Scotland where there have been a large number of applications (the GB queue) to be assessed at the same time. This approach has allowed National Grid and the Scottish Transmission Licensees to consider and study them as a group prior to offers being made.
5. For example: Using an incremental approach it may be possible to connect a new generator by building a new 132kV line. The connection agreement offered to this generator would contain a contractually binding connection date that reflected this work. Two subsequent applications are made for connection in the same part of the transmission system but cannot be accommodated using the same 132kV line and therefore trigger a further new line (2nd line). Obtaining planning consent for the 2nd line may be highly problematic given the presence of the first new line. Nevertheless, the contractual commitment to the first User requires that they be connected by the contracted and the only way of doing this is by building the first new 132kV line. The subsequent Users can only be connected via a new 275kV line which would only be likely to receive planning consent on condition that the first new line was dismantled. Had the three applications been considered together, then a single 275kV line could have been developed from the outset and therefore accommodate all applicants. This would have clearly been a more economic solution.
6. Historically, in England and Wales applications have been received on a more 'piecemeal' basis and so connection offers have been initially assessed on an incremental approach. Until recently there has not been any opportunity to consider applications and their overall requirements at the same time. However, once a contracted background¹ is established in any part of the transmission system with a number of new projects waiting to connect, National Grid reviews the various incremental reinforcements and determines whether there may be alternative more efficient developments that satisfy the contractual obligations to all Users in terms of the connection date and capacity. As a result of such optimisation National Grid may identify different reinforcements to accommodate a number of Users.

What determines a Cluster?

7. Determining a reinforcement for a cluster of projects is subject to various criteria. Some of the elements which influence the constituents of a cluster are as follows:

¹ Contracted background comprises of the existing transmission system and all authorised developments to it, together with all generation with signed agreements for connection to and/or use of the transmission system.

- Location of the Users and potential reinforcements. Users will only be party to a particular cluster if they are in similar geographical areas and require the same reinforcement to the Transmission System.
- Capacity of the Users. Depending on the nature of the incremental reinforcement and the capacity a User applies for, it may be more economical and efficient to include more Users within one cluster or fewer Users within that same cluster.
- Timing of the Users' projects. If a number of Users apply to connect to the same part of the Transmission System, a cluster may be formed in which all Users benefit from the same system reinforcements. If a number of Users apply to connect to the same part of the Transmission System but their requested connection dates are sufficiently apart (e.g. where the Users' connection dates and associated Transmission reinforcement works do not overlap), a cluster containing these Users will not be formed and Users will be assessed on an individual basis.
- Timescales within which transmission capacity can be released. Transmission capacity is released more quickly by identifying large incremental reinforcements to accommodate a number of Users as opposed to reinforcing the system in small steps. Spare capacity released as a result of reinforcement can be utilised by a new User if this does not affect other Users of the system.
- When Users apply for connection to the Transmission System, outage availability and construction period for the required reinforcements are considered when determining the Users within a cluster. The inclusion of a new User in to a cluster does not affect the completion dates of other existing cluster members.
- Capacity of incremental reinforcement. Significant reinforcements may create additional transmission capacity in large steps that allow more than a single User to benefit from the capacity released.
- Date on which the incremental capacity is available. Where several Transmission System reinforcements are necessary for a number of Users to connect, it may be possible to release incremental stages of reinforcement capacity. This enables Users to connect to the Transmission System earlier without waiting for all the reinforcements to be completed.
- Date the application from the User is received. Should a number of applications be received at one time for connection at around the same time, then the most economical and efficient cluster will be formed to accommodate the Users and offer them the most expedient connection date. Should an application be received by one User, and then another User at a different time, if it is economical and efficient to do so, a cluster would be formed to accommodate both Users provided that there is no impact on the completion date of the first (already contracted) User.
- How clusters impact on Users. It may be more economic and efficient to move a User from one cluster to another depending on the nature of the reinforcement (i.e. capacity released) and the geographical location of the User. In this case the User will be offered an earlier connection date. Later connection dates will not be offered.

Conclusion

8. In conclusion, Transmission Licensees, when identifying reinforcements (local and wider) required before a User can connect, will look at all Users with current proposals to connect in similar timescales and geographic area, rather than identifying such works on an incremental basis. This approach will identify the optimum reinforcement to connect all those Users.
9. This approach:
 - enables Transmission Licensees to identify the most economic and efficient overall investment strategy more quickly, as it seeks to optimise transmission investment more rapidly;
 - can help to accommodate a larger number of Users more efficiently; and
 - reduces the amount of interactivity (where offers are competing for the same capacity on the same reinforcement works), as a larger reinforcement reduces this.
10. It enables Transmission Licensees to meet their licence obligations to facilitate competition and to develop and maintain an efficient, co-ordinated and economic transmission system. These identified works are then specified as requirements before connection can take in Appendix H of the User's Construction Agreement.

2. Final sums

Why do Users secure works?

11. National Grid as a licence obligation to connect customers. Development of the GB Transmission System is largely driven by Users entering into Connection and Use of System agreements with National Grid. Works to accommodate these Users are identified and provided any transmission reinforcements are carried out efficiently then they will be allowed to form part of the Transmission Licensees' regulated asset base and the cost of the investments will be recovered from all Users (and ultimately from consumers) via the Transmission Network Use of System (TNUoS) Charges and Connection Charges.
12. Users' connection agreements with National Grid provide the right for the User to terminate the agreement (National Grid does not have this right except in certain circumstances, e.g. the User is in breach of the agreement). If part way through a particular reinforcement the User that had triggered it withdrew (terminated their agreement) then this may result in unnecessary transmission work having been undertaken/monies spent. If the transmission licensee were to be permitted to include these costs within its regulated asset base then the cost of the abortive works may be borne by other Users of the Transmission System through higher TNUoS charges (ultimately customers).
13. If a User decides to pull out of the project during the construction phase, then (if the works cannot be reused) it is appropriate for that User to bear the financial costs of its decision in relation to the works that it has triggered. It is not appropriate for these costs to be borne by other system Users, neither is it appropriate for the Transmission Licensees to face the risk of stranded assets against which no return will be allowed.

This model of security where the User is making a financial commitment to the reinforcement works (in the form of Final Sums) is supported by Ofgem.

14. Once the Users triggering a reinforcement have connected to the transmission system then the need for the User to be liable for Final Sums usually falls away²³. This is because by connecting and using the transmission system the Transmission Licensees' investment can be demonstrated as being necessary, economic and efficient.

What are Final Sums?

15. Final Sums are defined in the Users' Construction Agreements. The definitions currently being used have been developed from the standard text set out in the CUSC proforma (Schedule 2, Exhibit 3) to reflect the introduction of the sharing approach to Final Sums. The current wording to reflect 'sharing' is set out below. National Grid is currently reviewing this in light of comments received at the recent User seminars.

"Final Sums" the sum of **Shared User Final Sums** and **Sole User Final Sums**. Any dispute as to the amount of **Final Sums** shall be referred to arbitration in accordance with the **Dispute Resolution Procedure**.

"Shared User Final Sums" the amount payable by the User on termination of this Construction Agreement being the percentage share as set out in the Biannual Estimate for the period in which this Construction Agreement is terminated (such percentage share having regard to any other user whose Appendix H Part 1 (Shared User) contains the same Transmission Reinforcement Works as in Appendix H Part 1 (Shared User) to this Construction Agreement) of the aggregate from time to time and for the time being of:-

(1) fees, expenses and costs (excluding costs on account of interest charges incurred by The Company) of whatever nature reasonably and properly incurred or due by The Company in respect of any part of the Transmission Reinforcement Works in Appendix H Part 1 (Shared User) carried out prior to the expiry of the twelve month period to which the Bi-annual Estimate current at the time of termination of the Construction Agreement refers;

(2) fees, expenses and costs properly payable by The Company in respect of, or arising from the termination by it or any third party of any contract for or relating to the carrying out of any Transmission Reinforcement Works in Appendix H Part 1 (Shared User) provided it is negotiated on an arms length basis (including any such arising under the STC);

(3) fees, expense and costs due in accordance with Clause 2.4.1 in

² There are circumstances where an early connection date can be provided (Transmission reinforcements have not all been completed) and in such circumstances a User may continue to be liable for the works that it is triggering until the reinforcement works have completed

³ Note that National Grid is aware that these arrangements are currently being considered by Ofgem within the wider price control/access arrangements review.

respect of any Transmission Reinforcement Works in Appendix H Part 1 (Shared User); and

(4) interest on any such amounts from the date they were paid by The Company to the date of The Company's invoice at 2% over Base Rate from time to time and for the time being.

“Sole User Final Sums” the amount payable by the User on termination of this Construction Agreement being the aggregate from time to time and for the time being of:-

(1) all The Company Engineering Charges arisen prior to the date of termination;

(2) fees, expenses and costs (excluding costs on account of interest charges incurred by The Company) of whatever nature reasonably and properly incurred or due by The Company in respect of any part of the Construction Works carried out prior to the date of termination of this Construction Agreement;

(3) fees, expenses and costs properly payable by The Company in respect of, or arising from the termination by it or any third party of any contract for or relating to the carrying out of any Construction Works provided it is negotiated on an arms length basis (including any such arising under the STC);

(4) a sum equal to the reasonable costs of removing any Transmission Connection Assets and of making good the remaining Plant and Apparatus following such removal;

(5) fees, expenses and costs due in accordance with Clause 2.4.1 in respect of the Construction Works ; and

(6) interest on any such amounts from the date they were paid by The Company to the date of The Company's invoice at 2% over Base Rate from time to time and for the time being;

Provided that no sum shall be due in respect of Sole User Final Sums in respect of fees, expenses and costs associated with (a) the Seven Year Statement Works and/or (b) Transmission Reinforcement Works required for wider system reasons and specified in Appendix H Part 2 and/or (c) Transmission Reinforcement Works specified in Appendix H Part 1 (Shared User).

What is the User's liability for Final Sums?

16. The User's liability for Final Sums (User's Liability) extends to all costs for works contained within their Construction Agreement that are incurred in the event their agreement is terminated and where either the costs cannot be recovered through Transmission Charges, or the works cannot be reused.

17. Where an embedded generator triggers transmission reinforcements, then the liability for these works will frequently rest with the relevant Distribution Network Owner (DNO). The arrangements (if any) that the DNO makes to back off those liabilities with the embedded generator is a matter for the DNO.

Why are liabilities shared?

18. Transmission reinforcements frequently provide large “lumps” of capacity which can benefit more than one User. The old methodology led to situations where that one User was required to secure the entire reinforcement while other Users that would use the same reinforcement did not have to contribute. This was considered to be unfair. It created a perverse incentive to Users to change their connection dates to avoid the Users’ Liabilities as described above.
19. Furthermore, under the old methodology, the calculation of a User’s Liability always contained the uncertainty that as a result of the contracted background changing, the reinforcement works could change and this could significantly affect the position of a User in terms of the Final Sums for which they were liable. The most likely cause of this would be where a User that was triggering a particular reinforcement deferred their connection date until after another User (dependent on the same works). In some cases such “jockeying for position” to avoid a User’s Liability occurred numerous times. This created uncertainty both for the transmission company in terms of its investment requirements and for the Users concerned in relation to their User’s Liability.
20. The advent of BETTA with a large number of generation applications together with a clustering approach which identifies large reinforcements brought this issue into sharper focus. Expecting a relatively small generator, e.g. 30MW to be solely liable for very large transmission reinforcements, delivering several hundreds of MW of capacity that others would also use, was clearly untenable and arguably a barrier to entry.
21. The purpose of the new methodology was to bring about a more level playing field for new entrants, rather than the lumpy allocation of Users’ Liabilities under the old method. Thus, rather than having the one User having to secure all works triggered by his application, to the benefit of numerous subsequent applicants who get a “free ride”, the overall liability for the costs is now shared amongst all beneficiaries of the works. By spreading the liability across all Users, the methodology also has the benefit of requiring financial commitment from all Users rather than a select subset. It is also anticipated that those projects, which are unlikely to progress, would withdraw sooner rather than later so as to avoid their Users’ Liability, thus reducing the queue and facilitating entry to the market for those projects most likely to proceed.

Why 12 months for Shared Liabilities?

22. Where Users are sharing a reinforcement which allows each of the Users to connect and or use the Transmission System, each User’s Liability will be calculated based on the costs estimated to be incurred in the next 12 months.
23. When a User terminates, National Grid requires the 12 month period so that work can continue on the shared reinforcement (to meet the contractual requirements of the remaining Users) whilst National Grid attempts to either find replacement Users, reallocate the liabilities of the terminating User to remaining Users, or redesigns the reinforcements to take account of the new position. Without the Final Sums liabilities

applying for the 12 month period, the Transmission Licensee would have to suspend work following one User's termination until the situation had been clarified. (See conclusion document sections 3.18 to 3.23).

What makes up the costs in Final Sums?

24. Where transmission works are required for a particular User, these will be described in the User's Construction Agreement.

25. These works may contain the following elements:

- a) Connection Asset Works
- b) One-off works/ Advanced Services Works
- c) Sole Reinforcement Works (H1 sole works)
- d) Shared Reinforcement Works (H1 shared works)
- e) Wider Reinforcement Works (H2 works)

Final Sums will only apply in relation a)-d) above and the treatment of these is set out below.

Connection Asset Works

26. There may be Transmission Connection Asset Works (set out in the Construction Agreement Appendix G). These are the works required to provide Connection Assets for the User's connection. The User's Liability will relate to the costs estimated to be incurred in respect of the cancellation of such works in that 6 month period based on the Connection Asset Works to be undertaken in that 6 month period. National Grid will provide a forecast of final sums for this over the construction period on a 6 monthly basis.

27. Following completion of the connection the User will be charged for Connection Assets in accordance with the Charging Methodology. Where the User opts to make capital contributions for these assets during construction, then these payments will (partially or wholly) offset any liability for the Connection Asset Works during construction.

28. Following connection the User will continue to be liable for the termination cost of any Connection Assets. These costs are charged as Termination Amounts under the Charging Methodology.

One-off works/ Advanced Services Works⁴

29. Where these works are identified then the User will be liable for the associated costs upon termination. The User's Liability will relate to the costs estimated to be incurred in respect of the cancellation of such works in that 6 month period.

⁴ In some cases, where the development of transmission reinforcements cannot proceed as quickly as normal. e.g. where there is detailed costing and routing of sub-sea cables has to be undertaken, then this has been addressed through an additional stage in the construction project. These preliminary works are known as Advanced Services Works.

H1 Sole Reinforcements Works

30. These are the works that are only required for that specific User but are charged as infrastructure through TNUoS. The User's Liability will relate to the costs estimated to be incurred in respect of the cancellation of such works in that 6 month period.

H1 Shared Reinforcement Works

31. Shared reinforcement works are identified as being required for a number of Users. Where a clustering approach has been used then the Users in that cluster will share the liability for the works concerned. However, there will be cases where using an incremental approach to system design reinforcements will be identified that benefit multiple Users and in such cases those Users will share the liability for the works concerned.
32. The Users' Liabilities are for the costs estimated to be incurred for the shared works to be undertaken during the following 12 month period that commences at the start of that security period. For example, for the period April to the end of September, Users would be liable for the costs incurred during the following 12 months, i.e. 1st April to the 31st March.
33. The User's Liability for Shared Reinforcement Works (for each twelve month period) will be calculated on the basis of all signed Users who require that reinforcement. This is calculated on a pro-rata basis using the capacity of each User's project. For example, if the total reinforcement costs £1million and there are 3 Users with contracted values of 50MW, 200MW and 250MW, the respective liabilities are £100k, £400k and £500k.
34. An exception to this rule is where termination by any User would render all or some of the works redundant for the remaining Users. In this case all Users would each be held liable for 100% of the costs. This is necessary if National Grid is to be able to recover the cost of abortive works from whoever causes those costs by terminating their agreement. In the event that all Users sharing the reinforcement terminate, the cost of the abortive works would be shared amongst them all.
35. It should be noted that when a number of Users have a particular shared reinforcement specified in their Appendix H, but none of those have yet entered into an agreement, then initially the percentage liability will be set at 100% since no other User is yet liable for those works. If other Users sharing that reinforcement enter into their agreements, then the percentage liability will be amended when the next Secured Amount Statement is issued. The statement at that time will be based on the MW capacity that each User has contracted for (see paragraph 47). In addition, the Users' Liabilities are then for the costs estimated to be incurred for the shared works to be undertaken during the 12 month period. Where a number of Users have a particular shared reinforcement identified in their Appendix H, but only one or two Users ultimately sign their agreements, then the need for/scale of that shared reinforcement will be reassessed.

H2 Wider Reinforcement Works

36. The H2 Wider Reinforcement Works notify the User of other works that are required to meet their connection date. However, the User is not financially liable for these works as

they will generally be included in other Users H1 Works⁵.

37. It is possible that these H2 works for which the User is not currently financially liable could subsequently be transferred into the H1 Appendix in the event of a change in the contracted background.

Informing the User of their liability

38. When the User receives their offer from National Grid it contains a Secured Amount Statement, a Bi-Annual Estimate and an “S-Curve”. The Secured Amount Statement sets out an estimate of the User’s total liability for the Final Sums⁶. The Bi-Annual Estimate is a breakdown of the various elements of the User’s Liability, e.g. H1 Sole works, H2 Shared works, etc. over forthcoming security period. Finally an “S-Curve” is provided which shows the forecast of User’s Liability for each security period broken down by each of the elements of the reinforcement works until the end of the project.
39. Every six months National Grid will notify Users that do not meet the credit rating requirements of the CUSC of estimated User’s Liability by way of the Bi-Annual Estimate and Secured Amount Statement (in accordance with CUSC timescales). Where a User meets the credit rating requirements and so there is no obligation to put security in place, then National Grid will still issue an estimate of the User’s Liability for the forthcoming period. This so that the User is aware of their potential liabilities (using the form of the Secured Amount Statement).
40. The Final Sum periods are:
- 1 April – 30 September
 - 1 October – 31 March
41. The letter accompanying the Secured Amount Statement will identify the date the security is required to be in place.
42. It should be noted that the figures quoted in the Secured Amount Statement represent the transmission licensee’s **estimate** of its financial commitment and not the costs actually incurred at a particular point in time. For example, when a Transmission Licensee signs a contract with a supplier for a major plant item, such as a transformer, then while a relatively small stage payment may be made, a larger cancellation liability may also arise that would crystallise in the event that the order were to be cancelled following the termination of the User’s agreement. The Secured Amount Statement will set out the liability based on costs incurred by the Transmission Licensees as well as the commitment that would crystallise in the event of termination.

⁵ Reinforcements such as the Beaulieu-Denny upgrade are not secured by any party but are included in the H2 Appendix of the Construction Agreement for all relevant parties. This is because Ofgem has accepted this reinforcement as part of the relevant transmission licensee’s baseline investment programme.

⁶ Generally this will be for the current security period. However depending on when the offer is issued, it may cover the next security period as well. For example, an offer issued in June may contain a Secured Amount Statement which covers the period to the following 31 March, even though the Secured Amount Statement (SAS) for that period would not have been issued until mid July. This takes in account the offer validity period (3 months) spanning the timing of the issuance of the next SAS.

Security

43. Where a User does not meet the credit rating requirements specified in the CUSC then they are required to put security in place against their estimated Final Sums liability for the 6 month period (based on the sole works to be undertaken in that 6 month period and shared works to be undertaken in the 12 month period).
44. The forms of security acceptable are detailed in the CUSC Section 2, Paragraph 2.22.

Contracted background and change in User's Liability

45. The offer will be made on the basis of the contracted and shared background. Subsequent offers in the queue will have H1 and H2 works assessed against the changing contracted background, taking in to account any signed offers. As offers are accepted or terminated, the User will be advised of any significant change to the User's Liability that may result. Each User's Liability for the appropriate elements of the works will be identified and as further Users sign their offers, the liability for Shared Works will change when the next Secured Amount Statement is issued.
46. The number and size of contracted Users (and contracted timescales) sharing a reinforcement will affect the percentage share allocated to each User. This position will be re-assessed prior to the issue of each Secured Amount Statement (as shown in the Bi-Annual Estimate), either issued with each new Offer or issued for the forthcoming security period (in accordance with the Construction Agreement).
47. National Grid acknowledges that the change to the sharing methodology has resulted in changes to the liabilities faced by Users. Under the old methodology some Users may have faced the risk that their liabilities changed from 0-100%. The new methodology results in all Users facing a greater probability of a change in their liabilities, but that change would usually be significantly less than 100%. This issue is being considered further by National Grid in conjunction with Ofgem and industry participants.

3. Termination

48. The estimate of the User's Liability for the shared reinforcements, as set out in the Secured Amount Statement, is based on the costs expected to be incurred if all Users terminate their agreements in the next 12 months.
49. In the event that a User or National Grid terminates the Construction Agreement (e.g. when the User is in breach of the agreement), the User becomes liable to pay National Grid Final Sums. As the exact costs consequent on the termination will not be known at that time, National Grid invoices a User on termination on the basis of its estimate of that User's liability for Final Sums. National Grid will revise this and issue a final statement and invoice as soon as practicable (reconciled against any final sums payment already made by the User).
50. Where a User does not meet the required credit rating and a form of security has been required from the User, National Grid will draw down the monies in accordance with the terms of the Construction Agreement. National Grid will issue a final statement and invoice as soon as practicable, reconciled against any sums already drawn down.

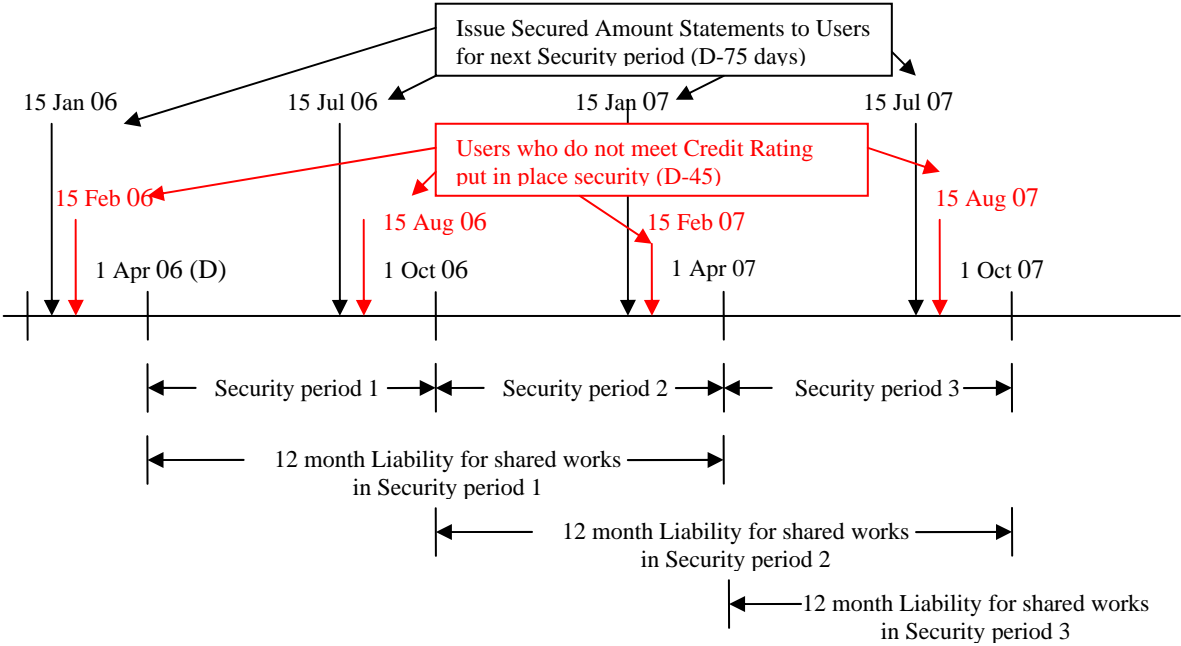
51. Where there are no “Shared Users works”, the decision to cancel the works set out in the Construction Agreement is clear cut and so it is easy to identify what works should be cancelled. They will be cancelled as soon as practicable after termination and identifying a User’s Liability in respect of those works is a relatively straight forward process. Where assets can be reused elsewhere (e.g. a transformer that has been ordered but not yet delivered may be suitable for use at another location) then this will be done so as to minimise the User’s Liability.
52. Where there are “Shared Users’ works” the need to cancel those works, and therefore the ability to identify the costs consequent (and therefore an individual User’s liability associated with this) depends on the decisions of the other Users who are sharing those works and whose contracted dates are still valid. Until the intentions of the remaining Users have been ascertained the works need to continue and the terminating User’s Liability for those works carries on until the end of the 12 month period.
53. If National Grid is able to replace the terminating User in the shared reinforcement works (within 12 month period) or other Users already sharing that reinforcement have accepted the increased liability (as notified by National Grid) to cover the liability of the terminating User, then a terminating User’s monies will be refunded (whole or in part), The liability will now sit entirely with the remaining Users (i.e. those Users that move forward or the remaining Users that take the increased share).
54. Under the definition of Final Sums, if a User terminates the Construction Agreement, the User is liable for the costs incurred or payable in respect of its sole works (except to the extent that any assets constructed are reused by National Grid). Additionally, if any or all the other Users sharing the Shared Reinforcement Works likewise terminate within the same 12 month period, the User’s Liability is based on the MW sharing ratio applied to the costs incurred (or payable in respect of those shared works), except to the extent that any assets constructed are reused by National Grid.
55. Where some or all of the other Users sharing the works proceed with their projects and the reinforcement works go ahead as designed, the terminating User will only be liable for those costs associated with the shared works, where the work done on those shared works is unnecessary or any resulting assets concerned are stranded (except to the extent that any assets constructed are reused by National Grid) as a result of that User’s termination.
56. For clarity, all liability for Final Sums in respect of transmission works will usually fall away once the transmission works are complete and the User has completed their works⁷. However, if the project is withdrawn after transmission works have commenced, costs of the abortive assets are forfeited. Any other works which may be used by other Users will not incur such costs. If the connection is terminated following connection then Termination Amounts are payable on any affected Connection Assets, taking into account any payments made.
57. Other Users using the same connection assets will bear their share of Final Sums costs. If one or more Users drop out but the works are still needed for non-terminating Users, the remaining Users will be asked to increase their share of the Final Sums’ liability and if this increase is accepted, the terminating Users will not incur any costs for that element of the works. If the remaining Users do not accept the increase in their liabilities

⁷ There are circumstances where an early connection date can be provided (Transmission reinforcements have not all been completed) and in such circumstances a User may continue to be liable for the works that it is triggering until the reinforcement works have completed.

and terminate their agreements then all Users will face Final Sums for the abortive works.

58. If there are a number of Users connecting to the same asset, and then some drop out, it may be that the asset will need to be amended or re-designed (on the basis that the original design was to accommodate all the Users' projects). If that is the case, the funds from those terminating Users will be used to cover those costs.

59. The following diagram illustrates the key dates in the issuing of Secured Amount Statements, when Users have to put security in place and 6 month security period.



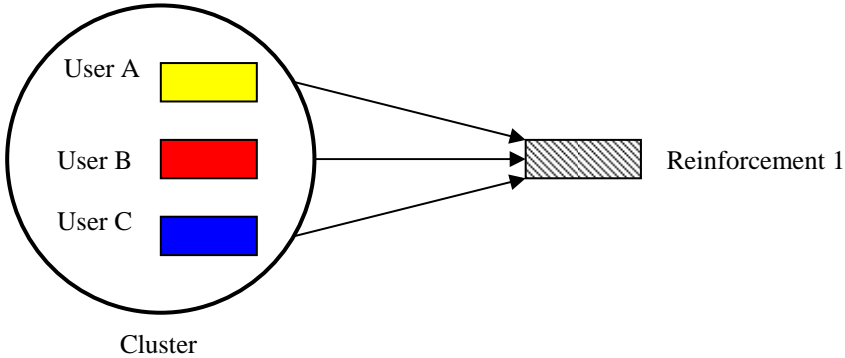
Examples to illustrate described principles

These examples are for illustrative purposes only and Users should refer to their National Grid Customer Agreement Manager for specific queries on their own projects.

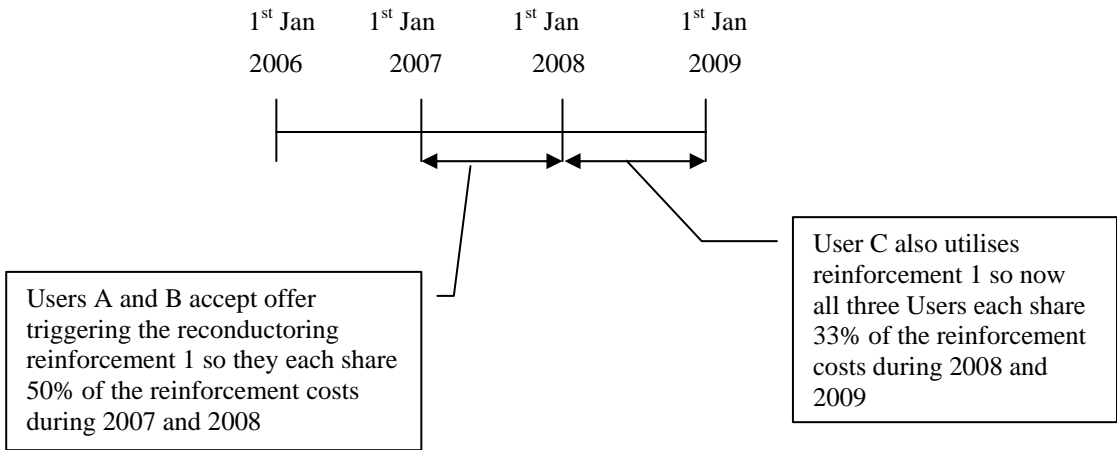
Examples 1-4 cover the principles behind clustering and sharing of reinforcements approaches. These examples do not cover the levels of Final Sums when offers are initially issued and assume that the Secured Amount Statement reflect the final contracted background for those identified reinforcements.

Example 1:

Users A and B are same sized generators of 500MW which each trigger and utilise the same reinforcement e.g. reconductoring of an overhead line, which will release 1500MW of capacity. Users A and B would share the reinforcement identified according to the pro-rata method. Reinforcement 1 starts in 2007 with a completion date in 2009. Therefore, each User will have a corresponding connection date in 2009.



Users A and B both accept offers in 2006 for access to the transmission system in 2009. A further User C also 500MW subsequently accepts an offer in 2008 for connection in 2009 and will also share liability for Reinforcement 1.

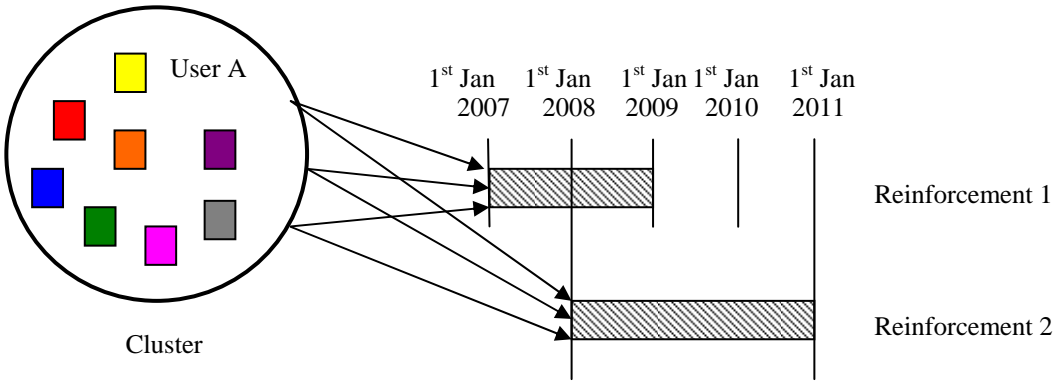


If either User A or User B terminates their agreement during the 2007-2008 period (User C is not contracted at that time) because the same reinforcement is needed for either of them, the remaining User, A or B, will be required to secure 100% of the reinforcement costs according to the Final Sums profile. However in 2008 User C accepted its offer and so

when determining the Secured Amount Statement, National Grid would identify the shared liabilities as 50% to, the two remaining Users.

Example 2:

Several Users, each with small TEC requirements each trigger and utilise Reinforcement 1 and Reinforcement 2. All Users form a cluster and share the identified reinforcements according to the pro-rata method previously mentioned. Reinforcement 1 starts in 2007 with a completion date in 2009. Reinforcement 2 starts in 2008 with a completion date in 2011. The completion of Reinforcement 1 is not sufficient for a single User to connect⁸, hence the completion date offered to all Users is following the commissioning of Reinforcement 2 in 2011. All Users accept their offers for access by 2007.



If User A terminates their agreement during the construction phase of either Reinforcement 1 or Reinforcement 2, and it is not possible to replace User A in the cluster, the remaining unsecured works will be reallocated amongst the remaining Users in the cluster so the construction works can be completed. The termination of User A’s agreement will lead to an increase in securities for the remaining Users (net of any payments already made by User A for the requisite cluster reinforcements).

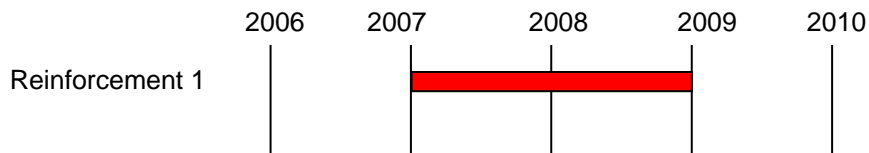
In the event of a number of Users terminating their agreements (perhaps due to the increase in securities required), it may be more economic and efficient to redesign the transmission reinforcements necessary for the remaining Users in the cluster, thereby reducing the required amount of transmission reinforcements. Reassessment of the system to accommodate fewer Users depends on the nature of the initial incremental capacity of the transmission reinforcements, construction phase timescales and impact on other system Users.

⁸ While Reinforcement 1 is not sufficient for any one of the Users to connect, it may provide some capacity that could be released to partially satisfy one or more Users. This example does not consider this complexity.

Example 3:

In 2006 Users A and B (each with a TEC of 500MW) apply for connection to the Transmission System. They both accept their offers to connect in 2009. They each individually trigger Reinforcement 1 which releases 1500MW of capacity and has a lead-time of 2 years. Reinforcement works begin in 2007.

In 2007 User C applies for connection in 2010 and also has a TEC of 500MW. The spare transmission capacity released by Reinforcement 1 allows User C to connect without further transmission system reinforcements.



During 2007-2008 Users A and B share the liabilities for Reinforcement 1 on a pro-rata basis according to their TEC (i.e. 50% each). Reinforcement 1 appears in Appendix H1 - shared works of their Construction Agreements.

During 2007/8:

- If User A were to terminate the next Secured Amount Statement would identify User B as liable for 100%
- If both Users A and B terminate, the liability for Final Sums is shared between Users A and B
- If both User A and B terminate then the next Secured Amount Statement issued to User C would show that User C is 100% liable for Reinforcement 1. At this stage User C could terminate with no liability in respect of Reinforcement 1 (see examples 10, 11, 12 on termination). However, if User C wishes to continue it would need to accept liability for Reinforcement 1 and hence Users A and B would no longer be liable. It should be noted that a User can decide whether it wishes to accept the higher level of User liability in the next security period or terminate and accept any accrued liability in the current security period.

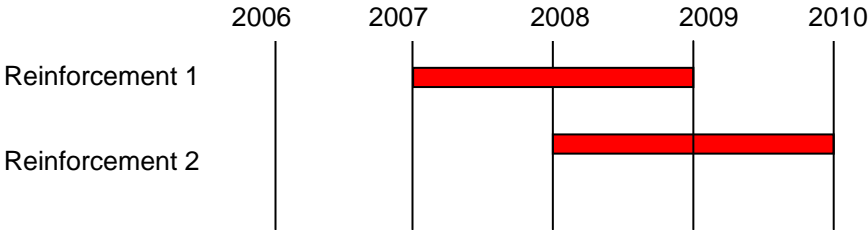
During 2008-2009 Users A, B and C will share the liabilities for Reinforcement 1 pro-rata 33% each.

If Users A and B both connect in 2009 then all final sums liabilities in respect of Reinforcement 1 cease. User C may have remaining liabilities in respect of local connection works.

Example 4:

As in Example 3, Users A and B (each with a TEC of 500MW) both apply for connection in 2006 and accept their offers to connect to the Transmission System in 2009. They both trigger and utilise Reinforcement 1 which releases 1300MW of capacity and has a lead-time of 2 years.

In 2007 User C (500MW TEC) applies for connection in 2010. The presence of User C means Reinforcement 1 has insufficient capacity so requires Reinforcement 2 to accommodate User C (e.g. up-rating of another transmission line which releases an extra 500MW). Reinforcement 2 also has a lead-time of 2 years.



During 2007-2008 Users A and B share the liabilities for Reinforcement 1 on a pro-rata basis according to their TEC (50% each). Reinforcement 1 appears in the H1 shared works of their Construction Agreements.

During 2008-2009 Users A, B and C share the liabilities for Reinforcement 1 (33% each)

During 2008-2009 Users A, B and C also share Reinforcement 2 (100% each). It is 100% because withdrawal of any of the 3 parties would mean that Reinforcement 2 is no longer needed.

If Users A and B both connect in 2009 then all Final Sums liabilities for Reinforcement 1 for all Users cease.

During 2009-2010 User C will secure 100% of Reinforcement 2 until its completion in 2010 when User C connects.

Examples 5-6: Final Sums

Illustrated below are three examples to explain the approach to calculation of Final Sums. The first two examples of how the Final Sum Profile / Secured Sum Liability are apportioned for a User who signs an agreement with National Grid who has both H1 Sole Reinforcement and H1 Shared Reinforcement Works in their Construction Agreement.

Example 5 - User 1 signs their GB Offer and No Other User has signed

User 1 signs a Connection Offer with National Grid for a 75MW generator. No other Users have signed an agreement with National Grid at this point in time and therefore User 1 is liable for **both** the H1 Sole and Shared works.

As the only party to have signed, User 1 is deemed to be a "Sole User" and will be liable for only 6 months worth of the Final Sum Liability.

User 1 – Based on User having a 75MW Power Park on a reinforcement with 100MW of Capacity

		H1- Sole		H1 - Shared (i)	%	H1 - Shared (ii)	%	H1 - Shared (iii)	%	Total
6 Month	Period 1	10	100%	3	100%	6	100%	9	100%	28
6 Month	Period 2	30	100%	5	100%	8	100%	15	100%	58
6 Month	Period 3	70	100%	6	100%	15	100%	20	100%	111
6 Month	Period 4	100	100%	15	100%	20	100%	30	100%	165

Example 6 - User 2 Signs GB Offer in the same cluster

User 2 now receives a Connection Offer from National Grid for a 25MW Power Park which has the same three elements of H1 Shared Works as User 1. This new Connection Offer affects the Final Sums Liability for both User 1 and User 2 in the following way.

User 1 - Final Sums Liability

User 1 needs to secure:

H1Sole Works - 100% of the Cost of the Works for a 6 month period

H1 Shared Works - The Shared Percentage over a 12 month period - 75%

		H1 Sole		H1 - Shared (i)	%	H1 - Shared (ii)	%	H1 - Shared (iii)	%	Total
6 Month	Period 1	10	100%	3	75%	6	75%	9	75%	31
6 Month	Period 2	30	100%	5	75%	8	75%	15	75%	61
6 Month	Period 3	70	100%	6	75%	15	75%	20	75%	119
6 Month	Period 4	100	100%	15	75%	20	75%	30	75%	149

User 2 - Final Sums Liability

User 2 needs to secure:

H1Sole Works - 100% of the Cost of the Works for a 6 month period

H1 Shared Works - The Shared Percentage over a 12 month period - 25%

		H1 Sole		H1 - Shared (i)	%	H1 - Shared (ii)	%	H1 - Shared (iii)	%	Total
6 Month	Period 1	10	100%	3	25%	6	25%	9	25%	17
6 Month	Period 2	30	100%	5	25%	8	25%	15	25%	40
6 Month	Period 3	70	100%	6	25%	15	25%	20	25%	86
6 Month	Period 4	100	100%	15	25%	20	25%	30	25%	116

In this example User 1 actually provides more security than if there was the only one User. This is a consequence of the relatively large share (75%) of the reinforcement and the fact that by using a 12 month period this outweighs the benefit of sharing. User 2 however provides **less** security for Period 1 even though it is securing H1 Shared Works for a 12 Month period rather than providing security for 6 Months of H1 Sole Works. In an example with more Users sharing the reinforcement it is likely that all Users would benefit from a reduced level of liability in comparison to the old methodology if they were the triggering User.

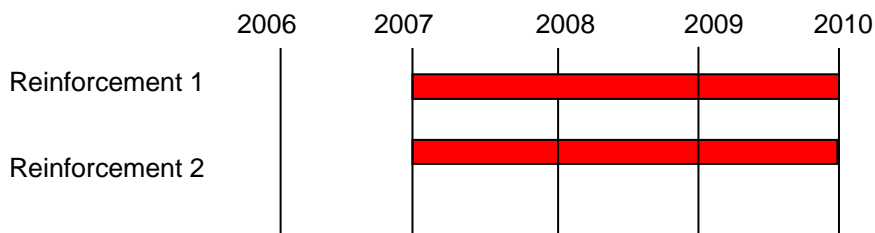
Examples 7-9

The following two examples illustrate the application of Users' Liabilities for shared reinforcements.

Example 7:

This example is typical of some situations in England and Wales where several reinforcements take place at the same time (i.e. in parallel).

Users A, B and C require 300MW, 400MW and 800MW respectively. Each of the three Users individually triggers Reinforcement 1 which releases 1000MW of transmission capacity. Additional works in the form of Reinforcement 2 are necessary once all the capacity released by Reinforcement 1 is utilised. Reinforcement 2 releases 2000MW of transmission capacity. The order they sign in is not important.



Users A, B and C would therefore share the liability for Reinforcement 1, which is necessary should any of the three Users proceed with their application. The share of liabilities for Reinforcements 1 and 2 between the Users is on a pro-rata basis according to their TEC and would be as follows.

User	Reinforcement 1 shared liabilities (%)	Reinforcement 2 % shared liabilities (%)
User A	20	20
User B	27	27
User C	53	100

If User A pulls out then User B and User C jointly require 1200MW of capacity and so Reinforcement 2 is still needed. On this basis while all three are contracted then User A should be liable for Reinforcement 2 on the basis of 300/1500ths share (20%). If User A has pulled out then Reinforcement 2 is still needed and assuming Users B and C continue then they are each now 100% liable for Reinforcement 2. This is because if either one of them now withdraws Reinforcement 2 is not needed. The same approach (but with different numbers) applies should User B pull out first. If all three Users terminate at the same time (within the same 6 month security period) then the liability would be shared between all three based on their TEC values as set out in the table above.

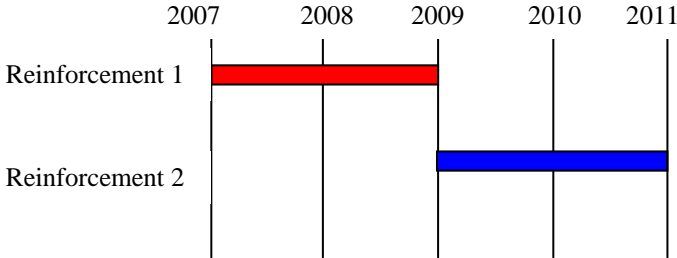
Finally if User C were to be the first party to withdraw, then Reinforcement 2 is immediately not required and so User C will be liable for 100% of Reinforcement 2 (it would be unreasonable to expect User A or B to be liable for any of the abortive costs). This would mean that the Users' aggregate liability in respect of Reinforcement 2 is more than 100% (i.e. liabilities for Reinforcement 2 are 20% to User A, 27% to User B, and 100% to User C). However each User is liable for the risk that they present in terms of abortive works.

Example 8:

This example is typical of some situations in Scotland where reinforcement works take place sequentially.

Users A and B trigger Reinforcement 1 to enable them to connect to the Transmission System in 2009 and both Users accept their offers. Reinforcement 1 works begin in 2007 and is fully complete in 2009.

In 2008 User C applies for connection in 2011. The reinforcements to connect User C are such that Reinforcement 1 must be completed before User C can connect. If Users A and B are both present then User C also triggers Reinforcement 2. Reinforcement 2 works begin in 2009.



During 2007-2009 Users A and B share the liabilities for Reinforcement 1 on a pro-rata basis according to their TEC. Reinforcement 1 is classed as shared reinforcement works (set out in Appendix H1) for Users A and B. If Users A and B connect in 2009 then all Final Sums liabilities for Users A and B cease.

For User C, Reinforcement 1 is classed as wider transmission reinforcement works (set out in Appendix H2) and therefore User C is not liable for these works. For User C Reinforcement 2 will be classed as sole reinforcement works (set out Appendix H1) and User C will be 100% liable for the costs incurred by Reinforcement 2.

Examples 9-12 of Termination

The following 4 examples illustrate the principles behind termination.

5 Users are sharing a set of Reinforcement works (R1), estimated total commitment for the next 12 month period is £100million. The assumption is that there are no sole works and all have the same connection date. Note that the figures assume that for the next 6 month period there is no increase in the total liability for the shared reinforcements.

User	TEC	% share	Security period commencing April 2006 (includes liability for next 12 months April 2006-April 2007)	Type of security in place as of 1 st April 2006
User 1	50MW	12.5%	£125k	LOC (valid until 1 Oct 2006)
User 2	100MW	25%	£250k	Escrow
User 3	75MW	18.75%	£187.5k	Parent company guarantee
User 4	25MW	6.25%	£62.5k	LOC (valid until 1 Oct 2006)
User 5	150MW	37.5%	£375k	Credit Rating
TOTAL	400MW	100%	£1million	-

Example 9: User 1 terminates, no other User is found to take its place. Therefore increase in liabilities for the remaining Users.

1. User 1 terminates on the 30 April 2006, National Grid will call down the security from User 1. Works continue on the shared reinforcement (R1) which is still required to meet the needs of Users 2, 3, 4 and 5. National Grid seeks replacement Users to take place of the terminating User 1. If no replacement User is found by mid July 2006, then National Grid will determine the revised liabilities for the forthcoming Security period (October 2006 – March 2007). Users providing security (Users 2, 3 and 4) will receive a new Secured Amount Statement. Those with an adequate credit rating (User 5) will be notified of the increased liability they face. Assuming Users 2, 3 and 4 accept their increased liabilities and put in place increased securities and assuming that User 5 also accepts their increased liability and does not terminate their agreement, then no termination amounts will be sought from User 1 and the moneys previously called down will be returned.

User	TEC	% share	Security period commencing October 2006 (includes liability for next 12 month liability October 2006-October 2007)	Type of security in place as of 1 st October 2006
User 1	-	-	-	-
User 2	100MW	28.57%	£285.7k	Escrow
User 3	75MW	21.43%	£214.3k	Parent company guarantee
User 4	25MW	7.14%	£71.4k	LOC (valid until 1 Oct 2006)
User 5	150MW	42.86%	£428.6k	Credit Rating
TOTAL	350MW	100%	£1million	-

Example 10: User 1 terminates but another User found to take their place, therefore no increase in liabilities for the original remaining Users.

1. User 1 terminates on the 30 April 2006, and their security is called down. Works continue on the shared reinforcement (R1) which is still needed for the remaining Users. National Grid seeks replacement Users to take place of the terminating User 1. A replacement User (User 6) is found by mid July 2006. Therefore, National Grid will determine the revised liabilities for the forthcoming security period (Oct 06 – March 07) based on the TEC values of the new Users sharing the liability of the reinforcement. This example assumes that User 6 is not an exact match for the terminating User 1. As a result the share of liability that each User faces will change slightly. Users providing security (Users 2, 3 and 4) will receive a new set of Secured Amount Statements. Those with an adequate credit rating (Users 5 and 6) will be notified of their liabilities. No termination amounts will be sought from User 1 for Reinforcement 1.

User	TEC	% share	Security period commencing October 2006 (includes liability for next 12 month liability October 2006-October 2007)	Type of security in place as of 1 st October 2006
User 1	-	-	-	-
User 2	100MW	25.6%	£256k	Escrow
User 3	75MW	19.2%	£192k	Parent company guarantee
User 4	25MW	6.4%	£64k	LOC (valid until 1 Oct 2006)
User 5	150MW	38.5%	£385k	Credit Rating
User 6	40MW	10.3%	£103k	Credit Rating
TOTAL	390MW	100%	£1million	-

Example 11: One User terminates and all but one of the remaining Users refuses to accept the increased liabilities for the works

1. User 1 terminates on the 30 April 2006 and National Grid calls down their security. The works continue on the shared reinforcement (R1) as they are needed for the remaining Users. National Grid seeks replacement Users to take place of the terminating User 1. No replacement User is found by mid July 2006. Therefore, National Grid will determine the revised liabilities based on the TEC values of the remaining Users sharing the liability of the reinforcement. Users providing security (Users 2, 3 and 4) will receive a new set of Secured Amount Statements in mid July 2006. Those with an adequate credit rating (User 5) will be notified of their revised liabilities at the same time.
2. However, if say Users 2, 3 and 4 now decide that they do not wish to accept the increase in liability (i.e. they fail put security in place by mid August). This will lead to National Grid calling down the security that each of these Users has put in place for the current security period (1st April to 30th September) and ultimately terminating their agreements. At this time User 5 will be notified of further revised liability (User 5 will now face a 100% liability for the period commencing 1st October 2006).
3. If User 5 does not wish to accept the 100% liability then it must terminate its agreement as well. If User 5 terminates its agreement before 1st October 2006 then all Users (User 1, 2, 3, 4 and 5) will be liable for Final Sums based on their percentage shares. If User 5 terminates its agreement after 1st October 2006 then it will have implicitly accepted the sole liability for reinforcement 1 and it will face 100% liability for Final Sums.
4. If User 5 accepts the 100% liability from October 2006, National Grid will either continue to search for replacement Users or if there is no prospect of this then will ask the Transmission Owner to consider revising the reinforcement works. Therefore Users 1, 2, 3 and 4 will continue to have liability for Final Sums for any abortive work until the end of March 2007.

Example 12 As per Example 11 but the remaining User (User 4) does not meet the National Grid Credit Rating

1. User 1 terminates on the 30 April 2006 and their security is called down. Works continue on the shared reinforcement (R1) for the remaining Users. National Grid seeks replacement Users to take place of the terminating User 1. No replacement User is found by mid July 2006. Therefore, National Grid will determine the revised liabilities for the forthcoming security period (Oct 06 to March 07) based on the TEC values of the remaining Users sharing the liability for the reinforcement. Users providing security (Users 2, 3 and 4) will receive a new set of Secured Amount Statements in mid July 2006. Those with an adequate credit rating (User 5) will be notified of their revised liabilities at the same time.
2. However, Users 2, 3 and 5 now decide that they do not wish to accept the increase in liability. This will lead to National Grid calling down the security that Users 2 and 3 have put in place, and invoicing User 5 based on the estimate of their liability, and ultimately terminating the Users' agreements. At this time User 4 will be notified of further revised liability. User 4 will now face a 100% liability for the period commencing 1st October 2006. However, User 4 will have only put in place revised securities (as notified by National Grid in mid July) via a new LOC for the security period October 2006 to the end of March 2007 for £71.4k (7.14%).
3. If User 4 does not wish to accept the 100% liability then it must terminate its agreement as well. If User 4 terminates its agreement before 1st October 2006 then all Users (User 1, 2, 3, 4 and 5) will be liable for Final Sums based on their percentage shares.
4. If User 4 does not terminate its agreement before 1st October 2006 then it will have accepted the revised position and it will face 100% liability for Final Sums for the reinforcement.

If User 4 does not terminate its agreement, National Grid will either continue to search for replacement Users or if there is no prospect of this then will ask the Transmission Owner to consider revising the reinforcement works. Users 1, 2, 3 and 5 will continue to have liability for Final Sums for any abortive work until the end of March 2007.

Finally, if User 4 accepts the higher liability and so reinforcement works continue then the Secured Amount Statement issued in January 2007 for the next security period (1 April 2007 - 30 September 2007) will reflect the position then existing. If User 4 remains the sole user requiring the reinforcement (whether it has been redesigned or not) then the estimated liability will be for a 6 month period and not for 12 months. If on the other hand other Users have been found to share the reinforcement that the figure will reflect the shares but based on the 12 month estimated liability.

Questions and Answers

The following is a set of frequently asked questions.

Q1 Do the 6 month and 12 month liabilities apply to all Users?

A1 The principle of Sole Works and Shared Works applies to all Users if contained within your Construction Agreement. The 12 month liability period for Shared works is applied to all new Users and is written into all new agreements.

Offers issued since The Consultation were based on a revised definition of Final Sums that broke them down into Sole User Final Sums and Shared User Final Sums. For Shared User Final Sums the User is liable for the percentage share set out in the Bi-Annual Estimate. For the Construction Agreements issued prior to this National Grid can provide revised drafting and we are pleased to provide further information on request from the User.

Q2 How does National Grid derive the Final sums profile?

A2 For England and Wales the estimated costs are provided by the Transmission Owner based on detailed analysis of the works required. For Scotland the costs are provided by the Scottish Transmission Owners (Scottish Power Transmission Limited and Scottish Hydro-Electric Transmission Limited) to National Grid. For further information see paragraphs 24-35.

Q3 Can National Grid provide a breakdown of the Final Sums profile between Shared User Works and Sole User Works?

A3 Yes, as this is described in the Construction Agreement with the User. The Offers issued since The Consultation were based on a revised definition of Final Sums that broke down into Sole User Final Sums and Shared User Final Sums. For Shared User Final Sums the User is liable for the percentage share set out in the Bi-Annual Estimate. For the construction agreements issued prior to this we are happy to provide revised drafting and we are pleased to provide further information on request from the User.

N.B for Scotland National Grid provided this breakdown in the Bi-Annual Estimates recently issued for security requested for the period 1 April to end of 30 September 2006. However, for England & Wales this breakdown was not provided but National Grid will seek to provide this detailed information for the next security statements to be issued in mid July for the period October 2006 to end of March 2007.

Q4 Can National Grid provide a more detailed itemisation of the Sole User Final Sums so a User can see what its liability is likely to be at any given point in the 6 month period?

A4 Normally, National Grid does not provide a more detailed breakdown than provided by the forecast of Final Sums over the construction period. If the period contains a step increase in the Final Sums liability then we may be able to identify milestones such as the letting of major contracts so the User is aware of the date of the increase in liability. However, once a User has signed an agreement then it is

committed to a 6 month or 12 month liability (dependent on Sole and Shared works). Once the construction phase has commenced, the User will be invited to regular construction meetings and these provide an opportunity for discussing any detailed concerns over the construction works, including spend profiles

National Grid can provide revised S-Curves with the Secured Amount Statement if the User requests this.

Q5 Can National Grid state the capacity released by a reinforcement, so a User can determine the potential for a reduction in their percentage share of Final Sums?

A5 Yes we can identify the capacity released by a particular reinforcement. Capacity is freed by the total reinforcement works. Security is required to securitise the costs incurred to start/complete the works. Normally, Secured Amount Statements are issued every 6 months. However, National Grid does recognise that, by exception, it can review the security requested based on the latest contracted background and enter into discussions with the User.

Q6 Does the variation in the number of parties participating in a shared reinforcement impact on the percentage share of the Final Sums liability from time to time?

A6 Yes, the number and size of contracted Users (and contracted timescales) sharing a reinforcement may affect the percentage share allocated to each User. This position will be re-assessed prior to the issue of each Secured Amount Statement (shown in the Bi-Annual Estimate) either issued with each new offer or issued for the forthcoming security period (in accordance with the Construction Agreement). Where there is significant change in the Final Sums liabilities of existing contracted Users as a result of a change to the contractual background (e.g. A User terminating or a User signing), then National Grid will advise the affected Users of the likely impact as soon as possible for information so that they can consider the potential impact on them in advance of the next SAS.

Q7 If a User terminates do any additional Final Sums liabilities continue to be incurred?

A7 The liabilities for Sole User Final Sums are those at the time of termination and no additional liabilities should be incurred post termination.

However, the liabilities for Shared User Final Sums will continue to accrue until either a substitute User is found (or the remaining Users' liabilities are increased to cover the deficit) or the end of the twelve month period. This will mean that if a User terminates when they receive a new Secured Amount Statement (e.g. 5 months into the current security period) then the liabilities would continue to accrue for another six months (see paragraph 33). The User's liability reflects commitment (not expenditure) for termination costs and may be different from the amount of security the User has in place with National Grid.

Q8 If a User pulls out of a project, how much of the money it makes available to National Grid as Final Sums liability does it get back?

A8 Final Sums are not payable once the connection has been provided and the User has completed their works (i.e. commissioned). However, if the User withdraws after transmission works have commenced, costs of abortive assets are forfeited. Any other works or assets that can be used by other Users will not incur such costs. If the connection is terminated following connection the Termination Amounts are payable in respect of terminated Connection Assets (see also Q7)

Q9 Are those costs shared then amongst the other local projects using the infrastructure?

A9 Other Users using the same infrastructure will bear their share of the Final Sums costs. If one or more Users drop out but the works are still needed for non-terminating Users, the remaining Users will be asked to increase their share of the Final Sums liability and if this increase is accepted, the terminating Users will not incur costs for that element, they may incur costs for any Sole User reinforcements relating to their project. Alternatively if other Users can be found to take the place of those who have terminated then similarly the terminating Users will not incur costs, since the works will still be needed by other Users. If either of the above do not apply, the terminating Users will be liable for Final Sums in respect of the abortive works.

Q10 Are there any circumstances in which a User will lose any of the funds it puts up?

A10 If a User terminates then the costs incurred on Sole Works will be recovered by National Grid from the terminating User.

If there are a number of Users connecting to the same asset, and then some Users terminate, it may be that the asset will need to be amended or re-designed (on the basis that the original design was to accommodate all the developers' projects). If that is the case, the funds from those terminating Users will be used to cover the costs of any abortive works. In the event that, despite a number of Users terminating, the reinforcement continues to be required by the remaining Users, then the terminating User's liability will fall away.

Q11 Can National Grid commit to capping a User's Final Sums liability to the amount provided in the Secured Amount Statement or profile in the S-curve? If not, what incentives are there on National Grid to keep costs down?

A11 No, the costs provided in the Secured Amounts Statement and the profile in the S-Curve are estimates of the proposed cost to undertake the required works. The actual costs could be greater or less than the estimated costs. If there were any excess National Grid can seek this from the User, however contractually it has no security for the excess. There are situations (see example 12) where the Users liability will be greater than the amount quoted in the Secured Amounts Statement – e.g. as a result of other Users terminating after the SAS has been issued.

Q12 Some Users have suggested that National Grid is not incentivised to provide an accurate forecast of Final Sums and so obtain a risk free level of security.

A12 National Grid has a licence obligation to develop and maintain an efficient, co-ordinated and economical system of electricity transmission. Furthermore, it is subject to a rigorous challenge and formal audit by independent consultants under the aegis of Ofgem. National Grid can only call down on costs that are incurred or committed (not forecast) from Users.

Q13 Can works listed in Appendix H Part 2 (H2) become transferred to Appendix H Part 1 (H1) or vice versa if the composition of the cluster(s) changes, i.e. can works for which no security is currently required become part of the secured works?

A13 It is possible that works for which no security is currently required (H2 works) could subsequently transfer into H1 works in the event of a change in the composition of the sharing group. Such a change is likely to be the result of a User with an earlier connection date terminating their agreement and may well be the result of advancing a User's connection date. National Grid has always needed the ability to modify the composition of Appendix H works within an Offer in the event that the contractual background changes. New works could be added within the Appendix H, or equally existing works could be removed so as to maintain an efficient and economic set of reinforcements.

Q14 Will a User have to wait until reinforcements specified in the Construction Agreement Appendix H are completed before it can connect?

A14 Generally speaking, yes. However, there will be cases where reinforcements are shared but capacity can nevertheless be released incrementally as the individual reinforcements are completed. Thus, a User could in some cases connect before all the identified works are finished.

Q15 Some Users believe that the process for allocation of works and liabilities is not transparent and is subject to change and are concerned over the lack of governance.

A15 The process that National Grid is following was consulted upon widely last year with seminars held and conclusions published on the National Grid website (see introduction). The process has to cover billions of pounds worth of reinforcement and connection works. The obligations under CUSC are still the same and the clustering/final sums process meets the requirements of the CUSC and allows a more equitable treatment of Users.

Furthermore, any change to the process has been made in response to the new external environment driven by User applications. Any CUSC changes to codify the process could be introduced by any party at any time.

Q16 Why do Users have to put up funds to cover National Grid's risk?

A16 Development of the GB Transmission System is largely driven by Connection and

Use of System contracts from Users. Therefore, it is the User who is triggering the reinforcement. The User is best placed to manage the risk. If a User decides to pull out of the project during the construction phase (Transmission Licensees do not have such unilateral rights), then it is appropriate for the User to face the costs of works that it triggers. It is not appropriate for these costs to be borne by other Users of the Transmission System.

Q17 To enable a User to assess the risk of increases in liabilities can National Grid publish the shared works that have been identified to connect Users?

A17 National Grid is investigating a means of publishing this information and aims to publish its thoughts in a consultation document in April 2006.

Q18 If there are so many projects waiting to connect so that National Grid is unable to identify the works required to connect Users, why cannot more of the significant reinforcements be baselined and as such not require any security?

A18 Ofgem have stated that User's commitment needs to be demonstrated to the project and the reinforcements required. Therefore, National Grid has sought for all Users to fully secure the costs of works.

Q19 Users are more able to secure works once they have consents. Could National Grid not require security for the works, until consents have been obtained?

A19 Users are better placed to manage the risks of their projects as they know more about their requirements, including obtaining consents and Users' risk appetite is for them. Where a User is unsure about the viability of their project (e.g. due to the absence of planning consents) then it would be inappropriate for National Grid to commence work on the reinforcements that the User triggers). Where Users are not ready to secure those reinforcements costs, then they should consider applying for a connection once their project has matured to a point at which they will be in a position to accept the Final Sums liabilities.

Q20 Could a User get a later connection date as a consequence of clustering?

A20 Transmission Licensees must ensure that any design is economic and efficient and must facilitate competition for all Users. In providing reinforcements that satisfy a number of Users in an area it is possible that the reinforcement concerned may take longer (due to it being larger) than the connection of one particular User. The clustering approach should however ensure that the maximum number of Users can be connected as quickly and economically as possible.

Q21 More assets could be initially identified as a consequence of clustering. Why should the first few Users be required to face the Final Sums liabilities on the basis of potential further Users?

A21 A User's offer is based on the contracted background at the time the offer is made. The transitional offers must be issued in a certain order. There is no relationship between this order and the members of particular cluster, i.e. we do not issue all

agreements for a cluster at or around the same time. Consequently there will be a period when some Users are considering their offers and others yet to receive offers and there will be uncertainty over which projects will sign and hence the final percentage share per User. By getting Users to secure the works, National Grid can ensure that the necessary reinforcements commence to meet the contracted connection dates. If the works had not been secured and National Grid had therefore waited until all the transitional offers issued and the contracted background was clear, this would have introduced a delay in commencing works of around a year for some projects with a consequent knock on to connection dates.

Q22 Some Users have stated that uncertainty in Final Sums liabilities will act as a barrier to entry to the market, and is thus contrary to National Grid’s obligation to promote market entry?

A22 This issue is dealt in detail in paragraphs 18-21. Under the old methodology some Users may have faced the risk that their liabilities changed from 0-100% as a result of the actions of at third party. The new methodology results in all Users facing a greater probability of a change in their liabilities, but that change would usually be significantly less than 100%. This issue is being considered further by National Grid in conjunction with Ofgem and industry participants.

Q23 The new methodology for sharing Final Sums liabilities was only brought about as a means to managing the access queue in Scotland, and should not be applied to E&W?

A23 Under BETTA there is one GB market, with the new framework providing a more equitable methodology for all Users.

Q24 Some Users believe that the exposure to a rolling 12 month window for shared works liabilities significantly front ends the liability for schemes, which are already having problems financing transmission development in advance of receiving consents?

A24 National Grid recognises that this is an issue for some Users (particularly those without consent). However, it requires the 12 month period so work can continue on the shared reinforcement to meet the contractual requirements of the remaining Users, whilst attempting to find replacement Users, reallocate the liabilities of the terminating User to other Users, or redesign the reinforcements.

Q25 If all Users sharing a reinforcement were to terminate in the same 6 month period what would their liabilities be?

A25 National Grid has adopted an approach of identifying a User’s share of the costs on termination on the assumption that all other parties sharing a reinforcement terminated within the same 6 month security period. The costs would be allocated between Users by reference to the MW required by that User.
