Issue	Revision
1.0	CONSULTATION DRAFT

Summary Report and Discussion Document on Entry Capacity Substitution

1 February 2008

nationalgrid

Contents

1 - General Introduction

1 National Grid Gas plc ("National Grid") is the holder of the Gas Transporter Licence in respect of the NTS (the "Licence"). The Licence is reviewed periodically (every five years) in the Transmission Price Control Review ("PCR") to set, principally, National Grid's allowed revenues as the owner and operator of the gas National Transmission System (NTS) in Great Britain. At the time of the PCR the rights and obligations are reviewed and may be amended.

2 The 2007 PCR introduced new obligations on National Grid in respect of the sale of NTS Entry Capacity. These new obligations have been the subject of much industry debate. This document reviews the debate to date on the "entry capacity substitution" obligation with a view to focusing industry attention on the issues that need to be resolved before the substitution obligation can be implemented. It is intended that this document will stimulate discussion to assist development of agreed policies and processes in accordance with the timelines identified.

Background

3 On 27 July, Ofgem issued an open letter announcing a further consultation on NTS entry capacity baselines. A link to the open letter is provided below.

http://www.ofgem.gov.uk/Networks/Trans/GasTransPolicy/Documents1/Further%20consultation%20on%20NTS%20entry%20capacity%20baselines.pdf

4 In this letter Ofgem recognised that other elements of the entry capacity regime required further development and may be impacted by a re-consultation exercise on the baseline numbers. They envisaged that the re-consultation on baselines should incorporate development of the broader entry capacity regime including:

- capacity substitution and the preparation of a substitution methodology; and
- incremental capacity release methodology.

5 Following the Authority's decision to modify the Licence the Authority issued a direction to delay the Entry Capacity Substitution obligations. The Authority's direction, dated 5th September 2007 can be found via the link below.

http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?file=Untitled218-07.pdf&refer=Networks/Trans/GasTransPolicy

6 In order to commence the baseline re-consultation process, National Grid agreed to conduct a series of three workshops during August and September 2007. The workshops were subsequently organised and chaired by the Joint Office. All referenced documentation and minutes of the workshops are available on the Joint Office website, via the following link:

http://www.gasgovernance.com/Code/Workstreams/TransmissionWorkstream/2007Meetings/

7 A summary document (dated 28th September 2007) was produced to bring together the content and output of the workshops and can be found on the Joint Office web page. A summary of this is provided in Annex 5

8 Prior to the announcement of a re-consultation on baselines and the delay to the entry capacity substitution obligation, National Grid had already consulted on its proposed arrangements for entry capacity substitution. These were detailed in National Grid's

consultations on the Entry Capacity Substitution Methodology Statement (dated 17th May 2007) and the Incremental Entry Capacity Release Methodology Statement (dated 8th May 2007).

9 A summary of the consultations on the two methodology statements is provided in Annex 1. Annex 2 contains a conclusions report on the Entry Capacity Substitution Methodology Statement consultation. This was not previously published as it was decided not to progress with the statement at that time.

10 A separate consultation was undertaken on the specific issue of a Reduced User Commitment in the event that incremental capacity would be provided through capacity substitution. The conclusions report is provided as Annex 4.

11 The consultation documents, responses and, in the case of the IECR, Ofgem's approval letter can be found on National Grid's web site at the following links:

http://www.nationalgrid.com/uk/Gas/Charges/statements/transportation/ecms/

http://www.nationalgrid.com/uk/Gas/Charges/statements/transportation/iecr/

Benefits

12 The latest PCR introduced several fundamental changes to the entry regime. The intended aims of the policy measures were to ensure:

- Baselines better reflect physical capability
- Spare capability is not sterilised
- Capacity is booked longer term
- Build periods reflect the new planning reality

13 To realise these benefits a number of specific changes were made:

- Adjustment of baselines
- Entry Capacity Substitution
- Entry Capacity Trade and Transfer
- Reduction to 10% of capacity held back for short term
- Permits / accelerated release

14 The intent of the substitution obligation is to ensure that investment in new infrastructure is not undertaken unnecessarily. The substitution obligation requires any spare capability at one ASEP to be used to meet requests for incremental capacity elsewhere. Hence substitution should further facilitate economic and efficient utilisation and development of the NTS. As part of a package of changes substitution should encourage Users to signal their capacity requirements in long term auctions thereby providing greater clarity on overall requirements such that capacity can best be made available where required, when required.

15 When considering the options for implementing the substitution obligation these benefits should be put into context. In Ofgem's recent press release[1] it is stated that Transmission costs account for 2% of a domestic consumers bills. (The proportion should increase for industrial consumers.) As some of the issues raised in previous discussions and in this paper demonstrate, the potential adverse impact of some substitution options in terms of complexity and resultant market uncertainty may far outweigh any potential benefit. It is therefore important that all stakeholders fully consider and express their views on the best way to implement the substitution obligation.

[1] Ofgem Factsheet 66 15/01/2008

2 - Key Issues with Entry Capacity Substitution

16 A number of significant issues have been identified in the consultations and workshops discussed in the previous section. Further issues have been identified as National Grid has sought to develop options for implementation of the substitution obligation. These issues are discussed below.

17 The first issue questions the fundamentals of the substitution obligation, whilst the remainder cover specific rules surrounding the implementation of a substitutions policy. A number of related issues, not critical to the application of capacity substitution, are discussed in section 3.

18 The issues are summarised as a list of questions in the section 4.

19 Dependant upon the timeline followed these issues can be further assessed and developed through the spring and summer Transmission Workstream meetings. However, should the shorter timetable be followed (see Annex 7), National Grid will present its indicative proposals to the March workstream meeting with a view to commencing formal consultation early in April 2008. National Grid is continuing to work to this shorter timescale. Hence interested parties, wishing to influence National Grid's proposals, should respond to this discussion paper no later than 26th February 2008.

20 Although the Licence requires National Grid to prepare an Entry Capacity Substitution Methodology Statement ("ECS") the issues raised in this paper are closely related to the release of incremental entry capacity. Hence National Grid anticipates that most issues (with the exception of the exchange rate cap) will be covered in the Incremental Entry Capacity Release Methodology Statement ("IECR") with the ECS describing the mechanism to identify donor ASEPs and to calculate the exchange rate.

A - Capacity Available for Substitution

Capacity Withheld

21 Under the Licence National Grid is required to withhold a quantity of capacity from the QSEC auctions. This capacity is available for new entrants and/or for short/medium term adjustments and amounts to 10% of the baseline quantity. This is a reduction from 20% in the previous price control.

22 This change, together with the substitution obligation is intended to encourage greater long term capacity booking and strengthen the User commitment required to trigger the release of incremental capacity.

23 Capacity available for short term auctions will, therefore, be at least 10% of baseline. If capacity is not fully allocated in QSEC then, without substitution, this will be higher. However, several Users have expressed concern that 10% is insufficient capacity to be retained for AMSEC and that capacity substitution will increase the likelihood of this limit being reached. The impact on Users is that they are being forced to buy for peak capacity requirements in the QSEC rather than buying base-load requirements with further adjustments made short term. Users do not necessarily know their precise requirements 4 years out. This added uncertainty will translate into increased risk, the cost of which will be borne by consumers.

24 A further impact is that capacity at declining ASEPs may not be available (if substituted away) for new, marginal, developments that rely upon existing infrastructure to be economic. Hence there could be an adverse impact on security of supply.

25 The issue is, therefore, essentially a balance between less investment and potentially less sterilisation versus less short term system (commercial) flexibility. However it should be noted that with the introduction of the Trade and Transfer obligations additional short term commercial flexibility will be provided.

26 National Grid believes that the 10% withholding issue has been discussed and agreed through the PCR process. As this is now specified within the Licence National Grid is obliged to make 90% of the baseline capacity (as specified in the Licence) available within QSEC auctions. However, any previously released incremental capacity will not be available for substitution. Despite this, Users may consider it beneficial to record their views so as to influence any future regulatory changes in this area.

Forecast Flows

27 A further possibility to assist Users would be for National Grid to make available in QSEC auctions, but exclude from substitution, the forecast level of capacity; i.e. only capacity in excess of forecast flows (as opposed to existing capacity allocations) and below the 90% baseline level would be substitutable. The forecast level could be the peak forecast supplies identified (for most ASEPs) in the Ten Year Statement.

28 The use of forecast supplies for the determination of the capacity available for substitution may however have some adverse impacts, as it could incentivise stakeholders to overstate their case thereby decreasing the value of forecasts to the industry.

29 In addition reserving capacity could counter any incentive on Users to book capacity in long term auctions that the substitution obligation might create and it undermines the principle of a strong User commitment.

Single Quarter Problem

30 A scenario exists whereby it is possible that capacity at an ASEP (the donor ASEP) is suitable for substitution to another (recipient) ASEP other than that capacity may have been allocated at the donor for a single quarter, potentially many years away. This would mean that National Grid must:

I. invest for incremental capacity at the recipient ASEP (i.e. not allow the substitution);

II. substitute capacity and invest for capacity at the donor ASEP for the future short duration use. Although it may be possible for National Grid to defer this investment there would, in respect of this investment, be no User signal;

III. substitute and accept the buy-back risk at the donor ASEP. This would be contrary to the Licence requirement to avoid material increases in costs and would expose National Grid and Users collectively to the impact of these future costs. Ofgem could adjust the buy-back incentive to cover the additional risk but as the scope of the risk is not known, and may be many years in the future, it would be difficult to determine what changes are appropriate.

In options II and III National Grid would decide approximately 4 years before the relevant capacity booking whether to invest or take the buy-back risk. Any investment would need to be demonstrably economic and efficient at that time.

31 This issue could be used by some Users to protect capacity at "their" ASEP from substitution. To do this, Users could buy a single quarter's capacity to protect their position. This could totally undermine the intent of the substitution obligation. The cost to Users to do this at selected ASEPs is shown below. The actual cost will be lower at some ASEPs where some capacity has already been booked, but this is not the case for all ASEPs.

ASEP	Reserve Price £/kWh/d	Approximate cost of capacity booking for one quarter						
		Cost per 10 mcm	Baseline GWh/d Ofgem option 1A	Cost of 90% B/L assuming no existing bookings	Jan 2012 existing bookings kWh/d	Cost of 90% B/L from Jan 2012 booked level	Jan 2021 existing bookings kWh/d	Cost of 90% B/L from Jan 2021 booked level
Bacton	£0.000098	£955,500	1783.4	£14,156,629	670,511,351	£8,242,719	693,867,983	£8,036,714
Barrow	£0.000036	£351,000	309.1	£901,336	167,000,000	£360,256	58,000,000	£713,416
Easington	£0.000080	£780,000	1062	£6,881,760	1,300,949,996	nil	1,217,842,649	nil
St Fergus	£0.000343	£3,344,250	1670.7	£46,417,058	583,677,831	£28,398,923	47,339,536	£44,955,687
Teesside	£0.000067	£653,250	476	£2,583,252	145,057,414	£1,708,556	0	£2,583,252
Theddlethorpe	£0.000068	£663,000	610.7	£3,363,736	19,100,000	£3,246,844	0	£3,363,736

32 Annex 9 provides a series of graphs for these ASEPs showing aggregate capacity bookings, forecast flows and the baseline quantities (Ofgem option 1A). This demonstrates the "short-fall" between baselines and the allocated quantity (or forecast flow quantity) which would be vulnerable to substitution.

33 Respondents may take the view that short term distant booking are genuine indications of long term requirements. Perhaps Users making such booking would be making medium and short term bookings nearer the date of use. If this is the case, is capacity in the preceding quarters and years, up to the peak allocation actually sterilised? Should such capacity be excluded from substitution?

34 Solutions to the potential problem (if it is a problem) of Users protecting their ASEPs from substitution include:

I. Placing a limit in QSEC to void any bids for capacity that do not span a minimum number of quarters (say [4]) over a defined period (say each [2 year] period). Limits such as this would require a modification to UNC, which could be raised prior to the substitution obligation becoming effective or later if perceived to be a problem. However, it may be considered unreasonable to retrospectively apply these rules. This option would also give rise to significant IT systems work to inhibit invalid User bids in the QSEC auction;

II. Capacity substitution could be time bound. As substitution is intended to minimise investment and encourage longer term capacity booking National Grid has taken the view that capacity substitutions are permanent (unless subject to a future substitution). However, the Licence definition of Entry Capacity Substitution does not specify a permanent movement of capacity. National Grid could therefore, substitute capacity up to the relevant single quarter. At this stage, when the substitution is close to expiring, the User(s) at the recipient ASEP would need to decide whether to request incremental capacity (by investment). This could result in the User being required to give two signals for the same incremental capacity. However, such further incremental capacity could be met by Transfer and Trade or may not be needed if, in the intervening years, User requirements change.

III. Facilitation of a distant, short duration, capacity surrender mechanism. This would require careful development to avoid Users buying capacity with a view to

surrendering. However, unless surrendering becomes compulsory in defined circumstances then this would not provide a complete solution.

B - Lower NPV Test

35 National Grid's original proposal was for the QSEC auction results to be assessed in the same way as in previous years. If any bids triggered the release of incremental capacity then substitution would be considered as an alternative to investment.

36 Currently release of incremental capacity is subject to auction bids providing a clear, unambiguous, signal, as demonstrated by passing an economic test (i.e. bids should be equivalent to at least 50% of the NPV of the deemed "investment"). National Grid's view was that the same test should apply even where no investment is necessary. Generally Users supported this view, although in some cases this was subject to further consideration. However, Ofgem have made clear their contrary view that a lower (or no) test should apply in the event of substitution.

37 The argument in favour of a lower NPV test is that if National Grid does not need to make any investment to provide incremental capacity then the requesting User should not be required to make a long term commitment to "under-write" the non-investment.

38 National Grid has argued in favour of applying the same test regardless of whether incremental capacity is achieved through investment or substitution primarily on the basis of the value of capacity. If new capacity is required at an ASEP, the User should be required to provide a signal that they are committed to using that capacity in order to trigger its removal from the donor ASEP. This capacity has the same value regardless of how the request is satisfied, so it can be argued that the User signal should be the same.

39 A further reason for applying a consistent test for the release of incremental capacity is the problem of distinguishing between incremental capacity satisfied by substitution from that satisfied by investment. This is discussed further below.

40 The problem with different NPV tests for investment and for substitution is that Users who bid low (for a substitution test) risk not getting any incremental capacity if it transpires that there are no substitution opportunities. It is impractical for National Grid to identify substitution opportunities in advance of the QSEC auction due to the complex interaction of individual, at that stage unknown, incremental capacity requests. Hence a lower NPV test for substitution under current QSEC arrangements is of limited value. For two NPV tests to be applied would require duplication of process to separate auctions and subsequent analysis into "substitution" and "investment".

41 Options to separate investment from substitution to allow two meaningful NPV tests include:

a) **Have a two bid (single round) auction** where Users can bid twice for the same quantity but with different overall values. The first bid would be considered against the "substitution test" and, where possible, capacity will be allocated using substituted capacity only. Unsatisfied first bids would be replaced by the higher, second, bid (if any) and considered against the "investment test" to trigger capacity release to be satisfied through investment, as in the current manner.

   Whilst this option could facilitate a lower User commitment for substituted capacity it would significantly extend the time taken to assess auction results and formulate investment plans.

It would have a significant impact on GEMINI – to allow two bids to be placed and assessed - with changes unlikely to be available for QSEC in April 2009 and a UNC modification would be also required.

This option is likely to be complex and confusing to some Users and may lead to unintended bids with incorrect signals being made. The issue of combined substitution/investment capacity releases could also be extremely difficult to manage.

However, a two bid auction would allow a User whose project does not support commitment to the investment test potential access to incremental capacity; the second (investment) bid would not be placed. This option also maximises the potential for substitution to be applied as it allows (subject to specific bid values) incremental capacity requests to be satisfied by a combination of substitution and investment if there is insufficient substitutable capacity alone to satisfy the request.

b) **Have two separate QSEC auctions**; one QSEC as now (potentially in April) where bids must satisfy the "investment test". Incremental capacity will be released subject to investment. A new, second, QSEC (possibly in September) could be held against the "substitution test". In this auction incremental capacity will only be allocated if it can be met through substitution. Obligated capacity could also be released in, or excluded from, this second auction.

This option could also lead to confusion and irregular bidding strategies if Users delay signalling requirements until the substitution QSEC.

Whilst not impacting on production of investment plans and requiring only limited changes to GEMINI functionality this option would impact significantly on National Grid resources; to analyse results from an additional new auction and to identify substitution opportunities.

The creation of a substitution QSEC auction would allow a clear distinction between incremental capacity release through substitution and through investment. With experience this should lead to a clearer, simpler, auction process. Under this option incremental capacity would be released as a result of substitution or investment, but not a combination of both. This may have added benefits in terms of regulatory accounting (clear reporting lines). It would avoid the potential problems if Ofgem were to reject National Grid's substitution proposals. Any rejection would not impact investment plans and timelines as they would be irrelevant to the substitution auction. This would not be the case for option a.

An additional benefit could be seen with the inclusion of existing obligated capacity in the substitution auction. This would, at ASEPs with unsold capacity, give Users a second opportunity to obtain capacity in response to changes in their portfolios.

c) **Offer a refund / discount to User bids**, after the auction allocations, in respect of incremental capacity requests that are satisfied by substitution. This would mean that, to guarantee release of incremental capacity, Users' bids must satisfy the existing investment test. However, where the allocation is met through substitution then the User's quarterly bids could be reduced in value such that they represent the substitution test value. This may have implications for GEMINI to facilitate over-riding of step prices.

This option would put pressure on National Grid/Ofgem to identify and approve substitution opportunities within the assessment/allocation cycle so that data can be entered into GEMINI.

This option would also require a UNC modification to allow National Grid to amend User auction bids. It is not certain that Users would want National Grid to have the right to amend bids, even downwards, as this could lead to significant risk in the event of input errors and disputes over liability.

A variation on this option would be that the refund could be managed by ad-hoc invoice adjustments, but this would require careful monitoring, potentially over many years, to ensure accurate refunds are made.

Again further complications could arise with part substitution / part investment scenarios.

This option removes the need for Users to consider two bidding processes; at the bidding and analysis stages it is identical to National Grid's initial proposal.

42 In the event that a lower substitution test is required then logically (assuming the above arguments are dismissed) the lower test should be zero% of NPV. This would weaken the economic signal required of Users and could lead to uneconomic release (by substitution) of capacity and consequential unnecessary later investment elsewhere. Hence a compromise test of [25%] NPV could be applied.

Further Issues Resulting from a Separate Substitution NPV Test.

43 In the event that a lower substitution test is required then further issues specific to the application of a substitution methodology arise that require consideration.

Combined Substitution / Investment

44 Analysis of User bids against separate NPV tests for investment and for substitution would be complicated, as discussed above. In addition, it is unlikely that all incremental capacity requests will be satisfied solely by substitution (except under the lower NPV test option b).

45 Where incremental capacity is provided through a combination of substitution and investment which test should apply? Should it be the investment test, the substitution test or a third test? If a third test is used, ideally this should be an extrapolation between the substitution [25%] test and the investment, 50% NPV, test. This would be an extremely complex iterative process and National Grid would spend significant resources calculating and demonstrating results and in justifying decisions taken.

46 It could be argued that, for simplicity, except where incremental capacity is provided solely from substitution then the investment test must be passed to trigger capacity release.

Competing Bids for Substitutable Capacity

47 Where the quantity of baseline capacity available for substitution is limited and where a lower NPV test applies for substitution rules need to be established to allocate this capacity.

48 Where competing bids satisfy the substitution test the allocation could be made on the basis of:

- Highest bid value;
- Most favourable exchange rate (where bids are for different ASEPs);
- Highest NPV value of bids.

49 Using highest NPV value would have advantages over other options as it uses the existing methodology for assessing bids and it may encourage Users to bid higher. Although a

project may not justify bidding to the investment test Users would maximise their bids to maximise the possibility of substitution.

50 Substituting for the most favourable exchange rate would minimise capacity destruction but setting an exchange rate cap is intended to prevent excessive capacity destruction. In addition using this criterion would not distinguish between bids at the same ASEP.

51 Following assessment of incremental capacity requests National Grid may identify substitution opportunities in respect of requests that meet only the substitution test and others that meet the investment test. National Grid would need to prioritise these bids. Maximum release of capacity would be achieved by substituting capacity for bids that do not satisfy the investment test before those that do. This would also maximise necessary investment. The reverse would see less Users obtaining the capacity that they need with a potential impact on security of supply.

C - Exchange Rate Cap

52 Capacity substitutions can rarely be achieved with a 1:1 exchange rate (i.e. quantity of capacity substituted from an ASEP divided by the capacity created at another ASEP). Inevitably substitutions destroy (by reducing the aggregate available) capacity. Some Users have expressed concerns at the possibility that substitution will result in excessive capacity destruction.

53 The loss of total system capacity could lead to some new or marginal developments not being able to input their gas onto the system. This could be detrimental to security of supply, competition in provision of gas supplies and to the gas industry's reputation.

54 To minimise capacity destruction under capacity Transfer and Trades an upper limit on exchange rates of 10:1 has been proposed. However, Transfer and Trade of capacity is time-bound whereas substitution is permanent, so a lower limit may be considered appropriate as it would be difficult to unravel any excessive substitutions.

55 In earlier consultations a limit of 1:1 or 1.5:1 has been suggested, but experience of Transfer and Trades (see table below for actual and potential results of the October 2007 Transfer and Trade auction[2]) suggests that this could be unduly restrictive. Respondents may consider a higher value more acceptable, e.g. 3:1 or 10:1. It should be noted that exchange rates for Transfer and Trades could be considerably different, even for the same combination of ASEPs, from those determined for substitutions as they are based on different scenarios.

2 This table was initially present at Transmission Workstream on 6th December 2007. The full presentation can be found on the Joint Office website. This table shows actual results from the October 2007 Transfer and Trade auction using generic (ex-post) exchange rates and potential results had specific exchange rates (i.e. calculated after auction closed) been used. At Barrow, Isle of Grain and Teesside capacity allocations were facilitated from capacity at the same ASEP or within the same zone so a 1:1 exchange rate applied. Easington obtained capacity from out of zone donor ASEPs at an exchange rate of 2:1 and 19.5:1. Using specific exchange rates capacity would have been transferred at 1:1, 2:1 and 8:1. Setting an exchange rate cap at, say 3:1, would have limited the capacity allocated to Users at Easington.

Bids by ASEP	Generic Exchange Rates (actual results)	Specific Exchange Rates (theoretical results)	Change (move from Generic to Specific)
Easington	85.4 GWh allocated Allocations from Isle of Grain XR 2:1 approx. and from Theddlethorpe XR 19.5:1	Approx 15 GWh could potentially have been allocated from Hatfield Moor XR approx 1:1 72 GWh could have potentially been allocated from Isle of Grain XR 2:1 approx. Approx 50 GWh could have potentially been allocated from Theddlethorpe at XR of approx 8:1.	Potential additional allocation of 51.6 GWh
Barrow	Bids allocated in full 1:1 Allocation from Barrow	Bids would have been allocated in full 1:1 Allocation from Barrow	Same
Isle of Grain	42.3 GWh allocated 1:1 allocation from Isle of Grain	42.3 GWh would have been allocated 1:1 allocation from Isle of Grain	Same
Teesside	23.8 GWh allocated 1:1 allocated from St. Fergus.	23.8 GWh could have potentially been allocated XR likely to be approx 1:1 from St. Fergus.	Same

D - Availability of Capacity for Substitution.

56 The question has arisen as to from when should substituted capacity be made available.

57 For example, in an April 2009 QSEC incremental capacity would, without substitution, be released subject to the normal investment lead time of 42 months i.e. by Oct 2012. However, if in April 2009 incremental capacity was requested for Oct 2010, just 18 months away, would/should capacity substitution be allowed? This would meet the new Users' requirements but would reduce existing capacity at the donor ASEPs. Existing Users would have limited time to protect their positions just 18 months away. If substitution 18 months away is not acceptable what about 30 months? Should the limit be set at 42 months?

58 This scenario poses a further question in terms of an early release (i.e. less than 42 months), as National Grid has a number of options / tools available, i.e. accelerated release, non-obligated release and permits. Should substitution be used in combination with any of these other tools?

59 In the case of substitution, there may also exist the possibility to undertake an early "substitution" release where the same donor ASEP, i.e. the one being used from 42 months, has capacity available from 18 months (if this is permitted). However where the most favourable donor identified from 42 months is not available from 18 months should National Grid choose a less favourable donor that is available for the whole period or use both consecutively?

3 - Related Issues

60 The following issues have been identified in addition to those key issues discussed above. Although not fundamental to the operation of a substitutions regime they have relevance to future reform or the timing of the introduction of substitutions. National Grid would be interested to receive views on these issues.

Alternative Economic Test / User Commitment

61 Review and reform of the NTS exit capacity regime has considered the merits of a User Commitment in respect of the allocation of incremental NTS Exit Capacity. Proposals are tending toward a four year commitment whereby Users will signal their requirement for capacity, National Grid will release capacity, subject to any necessary investment, and the User will be committed to using (or paying for) that capacity for four years. This four year User commitment will be considered sufficient for the associated investment to be considered economic and efficient.

62 Despite there being differences between Entry and Exit capacity consistent User commitments would appear logical. The release of incremental entry capacity after passing a quantity/duration test would be much simpler than the current NPV test; currently Users often need guidance on necessary bidding patterns to trigger capacity release, especially where more than one User is involved.

63 Some Users may consider that because of the seasonal nature of some entry points (e.g. Storage) a variation on the exit proposal would be desirable, e.g. 16 quarters booked over an eight year duration.

64 With regard to substitution, a revised test would need to be able to be adapted to provide dual-signals (if considered an essential feature of substitution regime) for the investment and substitution options. A revised test, based on duration of booking, would not, on its own, resolve the issues identified above (see lower NPV test); the same problems would arise. Should feasible solutions be identified then a lower e.g. 2 year commitment, could be applied.

New Entry Points

65 In respect of any new ASEPs National Grid may hold a separate QSEC auction solely for Users to signal their requirements in respect of that ASEP. Subject to completion of any necessary Licence changes this auction could be held at any time. These single ASEP auctions may be beneficial to Users at these ASEPs because

- The simplicity of the auction (no inter-acting ASEPs) may allow a degree of analysis to be undertaken prior to the auction. This may result in substitution opportunities being identified and signalled to the bidding Users. This would steer Users towards biddings to pass only the lower substitution test (if a separate test applied).

66 It is feasible that an auction may be held for a new ASEP in the summer of 2008. Subject to the timing of the implementation of the substitution obligation this auction may be before the next QSEC auction for existing ASEPs (i.e. before September 2008 or April 2009).

67 In this event, the new ASEPs will be able to benefit from substitution in additional ways:

- Users at existing ASEPs may not have had the opportunity to bid against the new baseline levels (if revised baselines are delayed and / or the 2008 QSEC auction is not

brought forward). Hence any upward revisions in baselines would be vulnerable to being substituted away;
- Users at new ASEPs would have first access to substitutable capacity without competition from other ASEPs. If a lower test was to apply for substitution, this early access could be considered to give preferable treatment.

Reserve Price Discounts

68 National Grid is obliged to undertake reasonable endeavours to make available all obligated capacity in at least one clearing allocation. This has been interpreted as a requirement to have a zero reserve price for firm capacity made available within Day and this is now encoded within the UNC.

69 These discounts were the subject of a National Grid discussion paper in May 2007[3]. By providing a discount to reserve prices Users are given a disincentive to book long term capacity. This can undermine long term planning signals and, as it is contrary to the substitution objectives, provides conflicting messages to Users regarding their bidding behaviour.

70 National Grid is considering how to take this issue forward.

Rate / Amount of Change

71 Concerns have been raised about the process for introducing change to the existing regime, including capacity substitution. Change is being introduced without adequate time to fully consider potential consequences and each element of the new policy is being introduced without understanding how they all fit together.

72 Some parties have expressed concern that fundamental changes are being made that make previous sound commercial decisions now appear less wise. The prime example of this being the incentive to book capacity short-term (baselines set high guaranteeing available capacity; zero price clearing auctions) now being undermined by substitution taking away the capacity that Users were expecting to be able to procure.

73 To minimise the potential for misunderstanding of the impact of substitutions within the entire package of reform National Grid has held back from putting forward proposals until progress has been made on:
- the baseline re-consultation;
- an enduring solution for Transfer and Trades; and
- moving QSEC auctions.

74 However, such a delay has condensed the available time for introducing substitution processes unless a further delay to the effective date of the substitution obligation is made. Any further postponement would be subject to implementation of UNC modification proposal 189 (to move QSEC to April) and agreement of the Authority.

75 On the basis that industry supports mod 0189 National Grid will seek Ofgem agreement to a further delay so that substitution is aligned to the QSEC 2009 date. This would give greater time for the industry to consider the issues in detail. The two possible timelines are shown in Annex 7.

3 NTS GCD 04: Revisions to NTS Entry Capacity Reserve Price Discounts. Which can be found on National Grid's web site at http://www.nationalgrid.com/uk/Gas/Charges/consultations/CurrentPapers/

4 - Questions for Discussion

76 National Grid would appreciate views from industry participants on the issues discussed in the previous sections, particularly if alternative solutions can be identified. Specifically National Grid seeks opinions on the questions below.

77 Responses should be sent to National Grid to arrive no later than 17:00 on 26th February 2008.

They should be sent to:
Andrew Fox
National Grid
Transmission Commercial
NG House
Warwick Technology Park
Gallows Hill
Warwick
CV34 6DA

Alternatively they can be sent by e-mail to:
box.transmissioncapacityandcharging@uk.ngrid.com.
And copied to andrew.fox@uk.ngrid.com

A. Capacity Available for Substitution.

What proportion of baseline capacity should be withheld from QSEC auctions (and substitution) for use in later auctions (the current Licence requirement is 10%)?

Forecast Flows

Should National Grid exclude from substitutions capacity up to the level of forecast (as specified in the TYS) flows?

Would this have an adverse impact on the quality of data provided in the Transporting Britain's Energy process which feeds into the TYS?

Would an alternative limit be appropriate?

Single Quarter Problem

Where capacity is currently booked at an ASEP for a single quarter in the future should this prevent capacity at that ASEP, to the level booked, being available for substitution in the period prior to that booking?

If yes,

what about two quarters?

should rules be introduced to prevent short-term, distant, bookings in future QSEC auctions?

Should the substitution of capacity be time limited, i.e. substituted capacity reverts back to the original ASEP after a set period?

Should a mechanism be established to allow Users to surrender capacity, i.e. similar to that proposed for Transfer and Trades but for a distant time frame?

B. Lower NPV Test

Considering the complexity of potential solutions, should different User commitment tests be applied for incremental capacity satisfied from substitution and from investment?

If yes, how should a dual-test be implemented?

If yes, what should the "substitution test" be (as a percentage of NPV or other alternative)?

Combined Substitution / Investment

In the event that incremental capacity is able to be released as a result of a combination of substitution and investment what test should be applied to trigger capacity release?

Competing Bids for Substitutable Capacity

Where capacity available for substitution is limited and a lower NPV test applies, how should such capacity be used?

Where there are two or more incremental capacity requests that only satisfy the lower (if any) substitution test what rules should apply to prioritise requests? Should this be based on the relative NPV of the relevant bids? Are there any alternative measures that could be used?

Should capacity be substituted to support incremental capacity requests satisfying the investment test only after consideration of those requests that only satisfy the lower (if any) substitution test? Or vice versa? Or should the same rules applying above apply to all requests?

C. Exchange Rate Cap.

To avoid excessive capacity destruction should capacity substitutions be prohibited if the exchange rate exceeds a specified value?

If yes, what should the cap on exchange rates be?

D. Availability of Capacity for Substitution

Assuming that substitution will be triggered by User bids submitted in the QSEC auctions for which capacity can be requested from 18 months ahead (e.g. April 2009 QSEC for October 2010 release) but substitution is intended to minimise investment (42 month lead time – October 2012 release) should National Grid substitute capacity to release incremental capacity ahead of 42 months?

If yes, should any limit be placed on the timing of such release, e.g. 18 months, 30 months?

If yes, should any measures be taken to protect (some/any) capacity at donor ASEPs?

Should substitution be limited to single donor ASEP or should combinations (substituted at different times) be allowed? All but the last would be time limited substitutions, e.g. Donor ASEP A used from year 2 to 4 but not available after year 4, donor ASEP B used from year 5.

E. Other Issues

Alternative Economic Test / User Commitment

Would Users support replacement of the current NPV test to trigger release of incremental capacity (irrespective of substitution)?

What alternative tests, e.g. four year booking commitment, would be appropriate?

Should different categories of entry point be treated differently, e.g. storage?

How should substitution and investment be distinguished (if at all) under any alternative test?

Ideally, when should an alternative test be introduced; i.e. for April 2009 QSEC or Sept 2008 QSEC or later?

New Entry Points

Do respondents consider that undertaking separate QSEC auctions for new ASEPs is unduly preferential? Are there any discrimination issues?

Should the timing of the introduction of the substitution obligation align to a regular QSEC auction where all Users have access in respect of all ASEPs?

Bearing in mind that these auctions could trigger the release of significant quantities of incremental capacity at new ASEPs, should substitution be excluded from these auctions?

Reserve Price Discounts

Notwithstanding the May 2007 discussion, do respondents support removal / relaxation of the reserve price discounts?

Other Issues

Respondents should not limit their comments to the above questions. National Grid encourages respondents to raise any additional issues that require consideration prior to implementation of the substitution processes.

In particular, we would be interested in people's thoughts as to how the substitution process may impact upon other elements of the entry capacity regime.

Annex 1: Consultation on Entry Capacity Substitution and Incremental Entry Capacity Methodology Statements: May 2007

Proposal

78 National Grid's original proposals for Entry Capacity Substitution were detailed in the proposed Entry Capacity Substitution Methodology Statement ("ECS") and the proposed Incremental Entry Capacity Release Methodology Statement ("IECR") which National Grid consulted upon in May 2007.

79 The ECS is limited to the mechanism to identify substitutable capacity, although it does set a cap on the permissible exchange rate. The actual exchange rate cap was not specified, being a specific question raised in the consultation.

80 The rules governing when incremental entry capacity will be released in association with capacity substitution were stated in the IECR. National Grid proposed that Users should signal their requirement for incremental capacity and that this User signal should be the same irrespective of whether the request would trigger investment or substitution. National Grid would determine, in accordance with the ECS, whether capacity could be substituted to meet the incremental request thereby satisfying both the licence obligation and the intent of that obligation.

81 The introduction of the substitution process would not be noticeable by Users because their capacity request would trigger investment exactly as in previous years, except that in later auctions Users would notice a decrease in available capacity at ASEPs where capacity had been substituted away.

Summary of Responses

82 Seven responses were received to the consultation on the ECS and a further two responses in respect of the IECR. All responses can be found on National Grid's website. None of the comments received on the IECR relate to capacity substitution.

83 A report on the responses received to the ECS consultation can be found in Annex 2. A number of concerns were raised. These included:

- Potential impact on Security of Supply if capacity is substituted away from ASEPs where new marginal developments are reliant on existing infrastructure to develop their projects. This could trigger investment at the initial donor ASEP when investment at the initial recipient ASEP (for possibly a smaller quantity) would have been more economic.
- Concern expressed at the speed of reform. Too much activity at one time.
- Concern at the possible effect on short-term markets. Substitution could remove capacity from ASEPs such that there will be insufficient remaining capacity to meet short-term demand.
- The application of the same NPV economic test for release of capacity where satisfied by substitution was questioned.
- Respondents expressed a preference for a low exchange rate cap to prevent excessive capacity destruction at the donor ASEP. National Grid's initial thoughts were for a cap at 1.5 : 1.
- Potential for substitution to be undermined by a short term (single quarter) capacity booking at some time in the distant future.

Annex 2: Entry Capacity Substitution Methodology Statement Consultation Report

84 This annex is a reproduction of the consultation report drafted following conclusion of the consultation on the ECS. This report was unpublished as it was decided not to progress with the statement at that time. It has been reproduced without alteration to reflect different terminology used at that time or to update for recent developments and revised understanding of the issues discussed.

85 Special Condition C8D of the Authority's proposals for National Grid's Gas Transporter Licence in respect of the NTS (the "Licence") sets out obligations to prepare and submit for approval by the Authority an entry capacity substitution methodology statement ("ECS") setting out the methodology National Grid NTS "NG NTS" will use to carry out capacity substitution.

86 On 18th May 2007 NG NTS initiated its consultation as part of the preparation of the ECS. NG NTS invited views in respect of the proposed Entry Capacity Substitution Methodology Statement to be made by 15th June 2007. Representations were received from the eight respondents listed below.

E.ON UK plc (EON)
Wales and West Utilities (WW)
EdF Energy (EdF)
Statoil (UK) (STUK)
Scottish Power (SP)
RWE npower and RWE Trading (RWE)
Excelerate Energy (EE)
BG Gas Services Limited (BG)

87 This consultation report provides a summary of the representations received from the above organisations, NG NTS's response and an indication of whether, as a result of such representations, any changes have been made to the proposed ECS.

88 NG NTS specifically requested views on one issue. This is whether an upper limit should be placed on the substitution exchange rate to prevent excessive sterilisation of capacity at the donor ASEP for minimal benefit at the recipient ASEP. Respondents were generally in favour of a limit although some were unable to suggest what the limit should be. NG NTS agrees with the concerns of the majority that substitutions may sterilize large quantities of capacity so is proposing a limit of 1.5:1.

Party	Issue	Response Quotes	National Grid NTS Response
1 – Security of Supply			
BG	Impact on donor ASEP may prevent new, smaller, offshore projects developing.	…as the UKCS declines, new gas fields tend to be small, have shorter life-spans and have marginal economics. Their viability is often dependent on there already being capacity available in offshore infrastructure, …… which is a more efficient outcome than building new import infrastructure. However the substitution proposals would mean that such fields could not count on there being equivalent entry capacity available on the NTS because it may have been substituted to an alternative terminal. Because capacity at the donor terminal will now have been sold out, a shipper will need to book sufficient long term capacity (32 quarters) to trigger new investment if he requires capacity at any time in the future at the donor terminal. This is less likely for small and short lifespan fields. The proposal therefore increases the risk of stranding UK gas supplies. The proposals may look efficient from a purely NTS entry capacity point of view, as they maximise utilisation of NTS capacity in the shorter term ….. However, by potentially stranding UK gas fields, they could raise costs to consumers if this means the UK becomes more reliant on imported gas more quickly than would otherwise be the case. Going forward the projects more likely to be able to make long term commitments sufficient to trigger new investment are those related to import infrastructure. The combination of the proposed substitution methodology and the IECR could result in the "terms of trade" being biased in favour of import projects rather than maximising recovery from the UKCS.	NG NTS has developed Entry Capacity Substitution proposals in response to anticipated Licence obligations. The forum for debating the merits of capacity substitution is in the consultation on the Licence not in consultation on this methodology. However, NG NTS recognises the risks that capacity substitution creates. Where an ASEP is not sold out the unsold capacity may be substituted away. This will mean that any later demand for incremental capacity must satisfy the economic test to trigger necessary investment (see IECR). Whilst NG NTS will continue to act to satisfy its Licence obligations it believes that measures should be implemented to prevent substitutions creating high "loss" of capacity at donor ASEPs. NG NTS is therefore proposing that substitutions should not be undertaken where the exchange rate would be greater than 1.5:1. In addition, NG NTS will have an obligation to review the ECS in consultation with interested parties. This should allow consideration of any lessons learnt over the initial winter's operation.
EdF	Impact on Storage contracts	We believe that the regime proposed by NGG should ensure that the incremental investment signals provided through the QSEC auction process are met using the most efficient and economic utilisation of the NTS. However we are concerned that the interaction between substitution and storage capacity contracts has not been fully recognised. We believe that these interactions should be recognised to ensure that the UK's security of supply is not compromised due to User's inability to provide signals within the correct timeframe. In particular we are concerned that most storage capacity contracts at certain storage facilities have a duration of less than 3 years, whilst the QSEC auction process goes out to 17 years. It would therefore appear that storage Users at these facilities will not be able to provide a long term signal with regards to their capacity requirements. There is therefore a risk that as the long term signals have not been provided the capacity is substituted away, and	See above

		some of the Rough storage asset could be sterilised as we are seeing this winter. This is of a particular concern given that this facility is likely to be called upon to meet the UK's peak demand. Failure therefore to recognise these interactions could therefore have a negative impact on the UK's security of supply. Whilst we recognise that these circumstances could be mitigated by the storage operator purchasing the required entry capacity to protect the value of their asset, we understand that in the case of Centrica Storage Limited this would require a change to their contracts with the associated hurdles.	
2- Limits on Exchange Rates			
BG	Limit on extent of capacity exchanges.	BG agrees with the concern highlighted by NG that the proposal could lead to a large amount of capacity being taken away from a donor ASEP to provide a relatively small amount of capacity at the recipient ASEP. BG is concerned that the situation could arise where, in future years, capacity is required at the donor ASEP for relatively short periods of time, but which would no longer be available. Furthermore to trigger new capacity shippers might have to pay more for the capacity than either they would have done had the capacity remained at the donor ASEP or than shippers were paying for the capacity at the recipient ASEP. This does not seem particularly efficient. BG believes there should be limits on the substitution of capacity between ASEPS, perhaps to an exchange rate of 1:1. However BG would like to see further consideration of these issues prior to implementation. Overall BG is of the view that a slight excess of capacity is better to enable gas to flow into the UK, rather than a slight deficit because of the disproportionate effect the latter can have on gas prices on the day.	The Entry Capacity Substitution obligation is intended to minimise system investment. It would be inappropriate therefore to invest for incremental capacity whilst "reserving" unsold capacity for future developments at the donor ASEP which may or may not be required. See also above. NG NTS agrees that it is preferable to have a slight excess of capacity than a shortage and hence that there should be limits on the substitution of capacity. In view of some of the concerns expressed by various respondents regarding the potential risks of substitutions NG NTS is proposing that substitutions should not be undertaken where the exchange rate would be greater than 1.5:1.
STUK	Future inefficient investment if demand returns to donor ASEP.	STUK has concerns that …. in the longer term it could lead to inefficient investment within the network. It does not address the issue of sterilisation of capacity caused by moving capacity from one location to another. In this scenario, capacity may be moved from one donor ASEP (ASEP-A) … to another recipient ASEP (ASEP-B) …. The methodology mandates that this capacity be moved even if the capacity donated is more than that received. The baselines would be altered to reflect the movement. In the following QSEC auction more capacity may be requested at ASEP-A. Rather than transfer back capacity from ASEP-B and provide the investment there, the methodology dictates that the investment must be made at ASEP-A, despite the fact that this is likely to be a higher investment cost.	The NTS is a complex system of interconnecting pipelines and investment at one location can have an impact at several distant locations. Following requests for incremental capacity NG NTS undertakes network analysis to identify the most efficient investment needed to meet that incremental demand. Capacity substitution opportunities are then investigated. Hence it is likely that the specific investment required to meet the demand at ASEP B (but was mitigated by undertaking substitution) would also provide the most efficient solution to meeting incremental demand at ASEP A.

EON	As above	If NG NTS transfer capacity on a poor exchange rate, there is a much greater chance that there will then be a requirement in a later QSEC to trigger incremental capacity at the ASEP from where the capacity has been taken. For example, if there is a requirement for an extra 50GWh/d from ASEP A, NG could take 100GWh/d from ASEP B on a 2:1 exchange rate. If the 100GWh/d is then needed at ASEP B (either because the shippers chose not to buy it, or because there is new gas at ASEP B), then NG will now be able to sell 100GWh/d of incremental capacity, on which they earn additional revenue, rather than only 50GWh/d originally. We do not believe this would amount to efficient and economic operation of the NTS.	NG NTS is proposing to limit substitutions to those where the exchange rates is no worse than 1.5:1. How NG NTS is funded in respect of incremental capacity (whether this is met by investment or substitution) is a matter for the Licence.
RWE	Upper limit on acceptable substitution exchange rates.	*Paragraph 24* - Capping capacity substitution exchange rates between donor and recipient ASEPs seems sensible in order to avoid potential sterilisation of large quantities of capacity in future QSEC auctions. However, at this point we are not able to gauge what an appropriate cap might be. A similar effect to capping could be created by restricting capacity substitution only from donor ASEPs within the same zone (or adjacent zones), but in the absence of further understanding of the potential for substitution in the future it is difficult to say how practical or effective this might be.	NG NTS is proposing to limit substitutions to those where the exchange rates is no worse than 1.5:1. NG NTS believes that limiting substitutions to within zone is contrary to the intent of the Entry Capacity Substitution obligation.
EdF	As above.	With regards to the maximum exchange rates, it would appear that it is appropriate that a maximum exchange rate is identified and implemented to ensure that no inefficient substitutions are enacted. However without any indication as to what the potential range of exchange rates may be it is hard to quantify the maximum and so any figure will be arbitrary.	NG NTS is proposing to limit substitutions to those where the exchange rates is no worse than 1.5:1.
EON	As above	Capacity would only be substituted if the exchange rate is good (for instance 1.5:1 or better);	Agreed
SP	Substitution from ASEPs with out spare capacity	We have already expressed our opinions on the proposed capacity trades and transfers. We believe that capacity should not be able to be moved away from an entry point where already not enough capacity is available to meet demand. Our understanding is that substitution methodology only applies to the Long Term auctions and only applies to unsold capacity.	The methodology does not permit the substitution of capacity from “sold out” ASEPs.
3 – Capacity available for Transfers and Trades.			
EE	Capacity should not be substituted across zones but reserved for later T&T.	We believe that the allocation of the Northern Zone baseline reduction that was implemented by Ofgem as part of the TCPR was essentially arbitrary. While St. Fergus received a baseline of 155 MCMD and Teesside 33 MCMD, it would have been equally valid to have had Teesside at 53 MCMD and St. Fergus at 135 MCMD. As we understand it, any constraint during the winter period is south of Teesside on infrastructure used by gas flowing into both Teesside and St. Fergus. Given this, we are concerned that any unused St. Fergus capacity should not be transferred to, for instance, Isle of Grain Phase 3, meaning that Teesside would no	The Entry Capacity Substitution obligation is intended to minimise system investment. It would be inappropriate therefore to invest for incremental capacity whilst “reserving” unsold capacity for future Transfers and Trades which may or may not be required.

		longer be able to have access to unused Northern Zone capacity (which it may be able to access as a result of the possible obligation on NGG to provide transfer and trading of entry capacity).	
4 – Treatment of Teesside ASEP			
EE	Specific mechanism to transfer capacity from St Fergus to Teesside.	The second point relates to NGG's Incremental Entry Capacity Release Methodology, which requires that all baseline capacity be sold for an 8 year period in order for incremental capacity to pass an economic test. Given this methodology, it does not appear economically possible in practice for Excelerate to secure long term capacity at Teesside to sufficiently increase Teesside's capacity baseline. We suggest that the Entry Substitution Methodology should include a mechanism by which capacity not required at St. Fergus or Glenmavis can be transferred to Teesside with an amended economic test that takes into account the fact that no investment is required.	NG NTS considers that to provide special processes for specific ASEPs could be considered as being discriminatory. The methodology should be equally applicable to all ASEPs, whether as a donor ASEP or recipient ASEP. If Excelerate believes that it is not possible to pass the economic test to trigger release of incremental entry capacity then NG NTS would be willing to discuss how this problem might be overcome.
5 – Process / speed of reform			
RWE	Wider debate	We have previously expressed support for the concept of entry capacity substitution (and entry capacity transfers and trade) to the extent that this has the potential to improve efficiency and prevent unnecessary network investment. However, we do have sympathy with the view expressed at the last UNC Transmission Workstream[4] that there needs to be a wider, and more informed debate, about the trade off between potential savings in entry capacity investment and the potential increase in commodity costs that may result. Whilst we recognise that National Grid's actions in this area are driven by anticipation of new licence conditions we believe that the piecemeal approach to reform of the entry capacity regime we have witnessed over the last six months has been detrimental, as it has created a climate of uncertainty and unease within the shipping community. As shippers are largely ignorant of the amount of, and potential for, entry capacity substitution/transfer that may realistically be possible in future, and were not party to decisions which led to the revised baselines, it is hardly surprising that concerns have been raised about the risk of gas being stranded and the consequent impact this could have on wholesale gas prices. These risks may or may not be real, but it if they are it is likely that the costs involved will far exceed any efficiency benefits resulting from the combined application of the proposed entry capacity substitution, transfer and trades	As has been recognised NG NTS is responding to anticipated Licence obligations. NG NTS would welcome wider debate and reflection before processes are implemented but the need to agree and implement changes for the coming winter, and to satisfy the Licence, have dictated the urgency. NG NTS recognises the risks that capacity substitution creates. However, whilst NG NTS will act to satisfy Licence obligations it is proposing to limit the extent of any substitutions to prevent extreme "loss" of capacity. In addition, NG NTS will have an obligation to review the ECS in consultation with interested parties. This should allow implementation of any lessons learnt over the initial winter's operation.

		methodology statements in their current form.	
SP	Licence drafting	We would first thank National Grid for the publication of this document. Also for the clarification on how the process should work. We appreciate on this occasion that the consultation is closing prior to the raising of any modifications. It would have been preferable to see the drafting of the licence obligation first, however.	Agreed
EdF	Too much activity	….concerned with the processes that have been followed in reaching this position. ….. The unexpected decrease in baseline capacity at Theddlethorpe as part of the TPCR process threatens to render some of the new infrastructure at this ASEP stranded, whilst not ensuring that NGG responded to the investment signals at Easington in the first year of the current entry booking regime has ensured that investment is being delivered a year late with certain facilities finding that there is not sufficient capacity to meet their requirements. We believe that the dramatic decrease in sudden baselines could have been mitigated by ensuring a transparent process was followed with sufficient lead time for Users to mitigate against these actions. Further the short fall in capacity at Easington could have been mitigated by ensuring that the signals for capacity were acted upon when received and not the following year. However we would also question whether the plethora of activity currently seen on entry is the most appropriate way to resolve these issues. EDF Energy believes that it is appropriate to allow the current entry capacity mechanisms sufficient time to operate before it is decided to change these arrangements with potentially unexpected consequences. ……This creates significant regulatory risk to the industry, potentially compromising the UK's security of supply position. This risk is further worsened by the fact that the licence conditions required to support these arrangements have not even been finalised. ……We further believe that licence conditions should be drafted and implemented with sufficient lead time to ensure that they are in place before the consultations are issued	In putting forward a capacity substitution methodology NG NTS is responding to anticipated Licence obligations and proposed changes to the Licence have been subject to industry consultation. NG NTS has responded to investment signals when they have been received. In accordance with the Licence any release of incremental capacity has followed the methodology described in the IECR. NG NTS recognises the risks that capacity substitution creates. However, whilst NG NTS will act to satisfy Licence obligations it is proposing to limit the extent of any substitutions to prevent extreme "loss" of capacity. In addition, NG NTS will have an obligation to review the ECS in consultation with interested parties. This should allow implementation of any lessons learnt over the initial winter's operation.
6 – Scope of Substitutions			
RWE	Substitutions where incremental request fails economic test (NPV test) in IECR.	*Paragraph 10a* - We note that the obligations in respect of capacity substitution apply only where National Grid is proposing to release incremental capacity (i.e. on condition that the economic test has been met). This is consistent with the anticipated licence drafting and our current opinion is that this is correct. However, we note the views expressed at the aforementioned Transmission Workstream that capacity substitution would be more efficient if applied to any incremental signal regardless of whether the economic test had been met, and believe that due consideration of this should be given as part of a wider debate.	The Entry Capacity Substitution obligation is intended to minimise system investment. Hence it is appropriate that substitutions are investigated only after the results of the QSEC auction have been determined. NG NTS believes that it is appropriate that any User requiring incremental capacity should make a commitment in respect of that capacity regardless of whether the demand is met by investment or substitution. NG NTS is prepared to explore how an

			alternative economic test might be applied where capacity substitutions are available.
STUK	Impact on short term markets	….this methodology …. does not take into account the impact that the sterilisation of capacity has on the short-term markets. It is possible that reduction of capacity available to the short-term markets could effect the both the revenue collected though the sale of short-term capacity and impact on prices in the commodity markets. The impact on markets is likely to be most acute at times of high demand or system shortage. STUK would suggest that the benefit gained from the transfer of capacity needs to be balanced against the impact on the short-term markets in some manner.	Not all capacity is made available at the QSEC auction. A proportion is held over and is not made available for substitutions. Hence capacity will continue to be available for the short term market albeit that some “unsold” capacity will no longer be available.
STUK	Capacity bidding strategy.	….the methodology could lead to Shippers using the QSEC auctions to remove the possibility that capacity is donated from an ASEP they may wish to use. This could be achieved by buying capacity for an ASEP up to the level of the baseline for a single month. This would ensure that that ASEP would not qualify as a donor and that capacity would remain available at the level of the baseline within the short-term process. Clearly this behaviour would further subvert this methodology.	It is expected that NG NTS will have an obligation to review the ECS in consultation with interested parties. Should User actions be identified as intending to undermine the intent of the Entry Capacity Substitution obligation then this can be considered as part of the review.
7 – Substitution Analysis Process			
RWE	Use of lowest revenue driver	*Paragraph 16* - We are not convinced that considering the recipient ASEP with the lowest licence revenue driver first is the most appropriate way to substitute capacity where more than one incremental requirement has been signalled. National Grid claim that this will ensure that priority is given to the ASEP which required the least infrastructure to satisfy the incremental demand, which may be the case. However, without analysing the avoided investment cost created by capacity substitution for each ASEP it is not possible to be certain which would be the most efficient. This suggests capacity substitution should be determined following analysis of all incremental signals rather than being based on this ex ante modelling criteria.	When determining the system investment requirement following the QSEC auction there may be numerous capacity substitution options available. NG NTS has limited time in which to investigate substitution opportunities and to finalise investment proposals. It is necessary therefore to create a process that defines which potential substitution to consider first. NG NTS agrees that the principle is to maximise efficiency and the avoidance of investment costs. NG NTS believes that the proposed methodology will achieve this in most, if not all, cases whilst providing additional advantages in terms of analysis time and transparency. This process will be reconsidered as part of the annual review of the methodology.
RWE	Para 20 - Material increase in risk	*Paragraph 20* - Whilst we accept National Grid's desire to avoid an incremental change in risk arising from capacity substitution we believe this should be qualified by reference to a "material incremental change in risk".	The methodology will be consistent with NG NTS’s understanding of the Licence at the time of submission of NG NTS’s final ECS proposals to Ofgem.

EON	Incremental risk	In para. 20, it is stated that *"the objective shall be to avoid incremental change in risk"*. We have a fundamental concern about the lack of clarity on what this actually means in practice. Allowing capacity substitutions only where it would lead to zero incremental risk is not satisfactory as it will severely restrict the amount of capacity that can be transferred through this, or any other transfer process. Zero incremental risk was the basis for the transfer and trade methodology but it is not expressly mentioned in respect of capacity substitution. Indeed the consultation text seems ambiguous on this point. Is this a deliberate difference? It is not clear. In any case, we would expect the interpretation to be consistent with that used for capacity trades and transfers. E.ON UK's understanding of the latest NG Licence drafting and indeed all previous Licence drafts is that there is no mention of "zero" risk. The correct interpretation seems to be no "material" increase in risk and this is completely and fundamentally different from zero risk. We would, however, look to NG in the near future to quantify and demonstrate what this actually means in terms of capacity substitution and indeed, transfers and trades, so that Users are able to understand the difference between "zero" and "material" and the impact on the amount of capacity that can be transferred.	The Licence has not yet been agreed. The methodology will be consistent with NG NTS's understanding of the Licence at the time of submission of NG NTS's final ECS proposals to Ofgem.
SP	Grouping of ASEPs into zones	We have concerns over the zones – the grouping of ASEPs is assumed to have a strong basis on physical flows, but we would like more transparency on that. We have maintained that the storage ASEP at Easington should be separate from the import facility there in terms of making capacity available. The mix of storage, LNG and other import terminals in some zones makes the transfer and substitution processes more or less reasonable. We think that the movement of capacity between import terminal ASEPs and transfers between storage sites (where unsold capacity remains) makes far more sense.	Zones have been developed on the basis of physical flows, i.e. common NTS infrastructure (see paragraph 13). It is within these zones that capacity is most efficiently substituted. As the Entry Capacity Substitution obligation is intended to minimise system investment it would appear counter to this aim if substitutions were restricted across storage and non-storage ASEPs.
EON	Definitions of Zones	We support the use of zones for capacity substitution. The same definition of zones should apply equally to capacity substitution as to capacity transfer and trade. In regard of Appendix 1, the list of Entry Capacity Zone ASEPs appears to be incomplete – the "South-West UK Zone" does not include Wytch Farm in the Appendix, but it is included in the NG 10YS	It is intended that zones will be defined in the same way for Capacity Substitutions as for Transfers and Trades. They may be subject to change particularly as new ASEPs are developed. Although Wytch Farm has negligible impact on the potential substitutions it will be added to the appropriate zone.
RWE	Para 23 Residual investment	*Paragraph 23* - We assume that the intent of this paragraph is that where it is only economic to make investment which exceeds the residual reinforcement requirement (because of set pipeline diameters for example), proposed capacity	Where residual investment remains and this is considered by NG NTS as uneconomic, relevant potential capacity substitutions shall not be proposed.

		substitution will be re-adjusted back at donor terminals equivalent to the difference between the actual incremental capacity to be built and the and the residual requirement.	This will leave a larger residual investment plan that is economic.
EON	1 to 1 exchange rate	We did consider whether 1:1 exchange rates should apply for substitution between zones, but …… it is probably better for a more accurate exchange rate to be calculated, which may not always be 1:1.	NG NTS agrees that specific values should be determined rather than using default values.
EON	Use of Peak flows	Exchange rates would be calculated using peak flows (i.e. the same methodology as was used to derive the baselines), noting that they could be better than 1:1 in some cases;	Substitutions will be made against "existing commitments" (see paragraph 21). This will include analysis at peak flows, but other conditions will be used to ensure existing commitments are satisfied throughout the range of demand conditions..
EON	Merit order	Within-zone substitutions could be considered first (which would be in-line with current proposals in development for capacity trade and transfers).	All within zone substitutions shall be progressed before across zone assessments (see paragraph 16).
EON	Role of Ofgem	National Grid would have to demonstrate to Ofgem how the exchange rate was derived; Ofgem would be required to approve the substitution (considering the consequences of losing the capacity at the donor) and the applicable exchange rate.	The role of Ofgem is defined within the Licence. This is anticipated to include the ability for Ofgem to veto NG NTS's application to release additional entry capacity to be treated as incremental obligated entry capacity. Such application may include details on entry capacity substitutions considered by NG NTS.
8 - Interactions with Exit Capacity			
WW	Impact on Exit Capacity particularly Flex.	One of the key unknowns about the new Exit regime is the availability of the NTS Flexibility Capacity product, both the total volume and the locations. The NTS is a dynamic system and changes to Entry flows will impact on the availability of Exit capacity. The NTS Flexibility Capacity product is particularly sensitive to flow patterns within the system. Market driven changes to Entry flows could have a significant impact on operation of both the NTS and downstream systems. This may be exacerbated by the difference in the Entry and Exit Capacity Zones. It is unclear whether the NTS will have any obligation to maintain, as a minimum, the 22 mcm per day as described in UNC Mod Proposal 0116V. …….Without this obligation in place, any Entry Capacity Substitutions agreed under this proposed methodology could lead to a distortion in the Exit market particularly for NTS Flexibility Capacity.	Potential capacity substitutions will be limited to ensure that existing commitments are not compromised. This includes any obligations in respect of exit points. The proposed Licence states that "in respect of the enduring exit period ….. use all reasonable endeavours to offer for sale ….. NTS baseline flow flexibility". NTS baseline exit flow flexibility is further defined as "the total across all zones in Great Britain shall be 238 GWh per day, unless the Authority otherwise directs".

Annex 3 Consultation on Reduced User Commitment: 22 June 2007

Objectives

89 As stated in Annex 1 National Grid's proposals did not, for the purpose of User commitment signals in the QSEC auction, distinguish between incremental capacity requests satisfied by substitution and that satisfied by investment.

90 However, in subsequent discussions between Ofgem and industry players it was suggested that Entry Capacity Substitution could be used to facilitate the release of incremental capacity without the need to pass the economic test detailed in the IECR. This was the subject of an Ofgem open letter dated the 27th June 2007; found at the link below http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?file=Open%20letter%20substitution%20-%20final.pdf&refer=Networks/Trans/GasTransPolicy and was also raised by a respondent to the ECS consultation (see above).

91 In order to gauge industry opinion National Grid presented options for a "relaxed" IECR NPV test where Entry Capacity Substitution was able to meet an incremental capacity request. The options are shown in Table 1 of Annex 4.

Summary of Responses

92 A conclusions report to the consultation on reduced User commitment can be found in Annex 4.

93 Respondents predominantly supported option 1 (National Grid's initial proposals) with the retention of the existing NPV test, although this was in the expectation of a later review. Other concerns were expressed, including;

- Potential unforeseen consequences of capacity substitution
- Users reiterated concerns that Security of Supply may be adversely impacted. Some Users considered that National Grid should not rely solely on auctions for investment signals.
- The lack of understanding of the criteria to be used by Ofgem to (dis)allow a proposed capacity substitution.

Conclusion

94 National Grid concluded that it continued to believe that its original proposal remained the best approach.

95 National Grid acknowledged support for the existing NPV test.

Annex 4: Conclusions Report on Consultation into Reduced User Commitment.

nationalgrid

CONSULTATION CONCLUSIONS REPORT

Review of the Incremental Entry Capacity Release Methodology Statement and Consultation on the Entry Capacity Substitution Methodology Statement: Further Consultation on Possible Reduced User Commitment.

9th August 2007
Final

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Executive Summary

This document sets out National Grid NTS's conclusions on its consultation on the possibility of setting, through the Incremental Entry Capacity Release ("IECR") Methodology, a reduced User commitment in circumstances where incremental entry capacity requests can be met by substitution of capacity from other Entry Points rather than by investment in new infrastructure.

There is unanimous support for a delay in the implementation of entry capacity substitution until after thorough industry consideration has been undertaken, with several respondents linking development of substitution to an enduring transfer and trade process. The consensus is that there is insufficient time to adequately develop substitution processes for September 2007 QSEC auctions.

1. National Grid NTS welcomes Ofgem's decision to postpone the requirement on National Grid NTS to implement entry capacity substitution for the September 2007 QSEC auction and supports its proposal for a broader entry capacity regime development project.

2. Considering this postponement National Grid NTS proposes to make only a slight further modification to the approved IECR Methodology Statement. This will be to delete paragraph 15 and the first three lines of paragraph 37 which state that National Grid NTS will consider whether capacity substitution can satisfy requests for the release of incremental entry capacity.

Following the proposed entry capacity regime development project National Grid NTS will consider any relevant changes as part of the review of the IECR in 2008.

Introduction

Special Condition C15 of National Grid's Gas Transporter Licence in respect of the NTS, "the Licence", sets out obligations to prepare and annually review the Incremental Entry Capacity Release ("IECR") Methodology Statement. As part of the review, National Grid NTS is obliged to consult with shippers on proposed changes. On the 8th May 2007 National Grid NTS provided notification of its proposed changes to the IECR Methodology Statement and invited views on those revisions. A subsequent letter, dated 23rd May 2007, invited views on two specific issues relating to the proposed IECR.

In its letter of 16th July 2007[5] Ofgem approved the proposed IECR which was submitted to the Authority for approval following consideration of industry comments.

Special Condition C8D of the Authority's proposals for National Grid's Gas Transporter Licence in respect of the NTS[6] sets out obligations to prepare and submit for approval by the Authority a capacity substitution methodology statement setting out the methodology that National Grid NTS will use to carry out capacity substitution. In addition, National Grid NTS is obliged to consult with relevant shippers and DN operators prior to submitting the initial statement or revising the methodology. On the 18th May 2007 National Grid NTS provided notification of its proposed Entry Capacity Substitution Methodology Statement ("ECS") and invited views on the proposal.

5 Incremental Entry Capacity Release "IECR" Methodology Statement, Ofgem ref 182/07 dated 16/07/07
6 Notice under Section 23(3) of the Gas Act 1986 Ofgem ref 195/07 and NGG NTS Proposed Licence Mods Ofgem ref 195/07a.

Prior to approval of the IECR in discussions with Ofgem and between Ofgem and industry players it was suggested that Entry Capacity Substitution could be used to facilitate the release of incremental entry capacity without the need to pass the economic test detailed in the IECR. This was the subject of an Ofgem open letter[7] dated the 27th June 2007 and was also raised by a respondent to the ECS consultation.

In order to gauge industry opinion National Grid NTS presented, at the Transmission Charging Methodology Forum ("TCMF") of 5th July 2007, a review of the IECR (as submitted to the Authority) and potential options for a "relaxed" IECR test where Entry Capacity Substitution is possible.

Subsequent to the TCMF, on 12th July, National Grid NTS issued a letter seeking views on the potential options.

This report outlines the original proposals made in the IECR, the alternative options presented at TCMF and summarises the representations received from interested parties. It concludes with recommendations in respect of changes to the approved IECR and any other actions considered necessary following consideration of representations received.

Proposals for Capacity Substitution

Original Proposals for Capacity Substitution

In the IECR consultation letter of 8th May, National Grid NTS described the likely impact that Entry Capacity Substitution would have on the release of incremental entry capacity. Specifically it stated

> "The Authority's proposals for the Licence include a new obligation in respect of the substitution of NTS Entry Capacity. This condition will require National Grid NTS to use reasonable endeavours to undertake capacity substitution where proposing to release capacity incremental to the prevailing level of obligated entry capacity. This is intended to promote the economic and efficient sizing of the NTS by seeking to minimise the amount of investment that is required to satisfy incremental demand. Unsold capacity could be identified as suitable for substitution from "donor" locations where it appears not to be required due to the absence of signals in the long term (QSEC) auctions".

The letter continued:

> "The release of incremental capacity will not be affected by this new condition; release will still be subject to the tests defined in the methodology statement. However it will impact on whether National Grid NTS invests to meet the incremental demand and may impact on the availability of capacity at the donor locations in future auctions."

The effect of National Grid NTS's proposal in the IECR is that all requests for incremental entry capacity will be treated equally and all will need to satisfy the economic test described within the IECR. Only after an incremental capacity request has been accepted will capacity substitution be considered; and then only as an alternative means to satisfying the request. The proposed process should have no direct impact on the party requesting incremental capacity.

7 Ofgem: Open letter substitutions, 27th June 2007, ref 157/07

Alternative Proposals for Capacity Substitution

At TCMF on 5th July National Grid NTS outlined three potential alternatives for release of incremental capacity where capacity substitution is possible. These were included in the letter of 12th July and are repeated in table 1 below. Each of the alternatives was presented as high level initial thoughts and none had been subject to rigorous assessment of the consequences of their implementation.

Option 2 would extend the proposed transfer processes beyond winter 2007/08 to include the 42 month investment lead time. The key advantage of this would be to limit "substitutions" to defined periods thus avoiding long term loss of capacity from the donor ASEP.

Option 3 acknowledges that where incremental capacity is met through substitution, i.e. there is no investment; there should be no need for an economic test. Thus the 50% NPV test could be reduced or removed. However, this does raise issues in relation to User bidding strategies if the potential for substitutions is not known in advance. A further complication arises where requests are met by a mixture of investment and substitution.

Option 4 tries to address some of the issues of option 3. The existing (option 1) NPV test is required to be satisfied before incremental entry capacity is released, but where capacity substitution is available the User Commitment can be reduced. This will be in line with conditions placed on the auction bids by the relevant User, e.g. bids placed for the longer term may be withdrawn.

Responses

Summary of Responses

National Grid NTS received nine responses to the consultation. These are summarised in the table below and considered in greater detail in the following paragraphs.

Some respondents referred to their earlier comments provided in response to the ECS consultation which can be found on the National Grid website.

Respondent	Short Code	View	Preferred option
British Gas Trading	BGT	Support principle of substitution. Delay implementation.	None specified.
Statoil (U.K.) Limited	STUK	Concerned with all options (including option 1). Delay implementation.	None.
BG Gas Services	BGGS	Delay implementation.	Option 1.
EDF Energy	EDF	Delay implementation.	Option 1.
RWE npower	RWE	Delay implementation.	Option 1.
Total E&P UK Ltd	Total	Support for mechanism to limit capacity sterilisation. Delay implementation.	Option 1.
Conoco Phillips	CoP	Much fuller discussion required before proposals are formulated.	None specified.
E.ON UK plc	Eon	Delay implementation.	Option 1.
ExxonMobil Gas Marketing Europe Ltd	Exx	Complete industry-wide review needed	Option 1

Respondents' Views

There is clear support (from all respondents) for a delay in the implementation of any Entry Capacity Substitution processes at least until significant consideration has been given to the potential consequences. Respondents feel that there has been insufficient consideration of the options and potential consequences of capacity substitution.

- BGT recommends a delay "until a fully defined change in methodology can be adopted".
- STUK wants time for "the industry to better prepare for their [the changes] implementation and ensure the new regime is fully formed and workable.
- BGGS wants "a thorough review of the entry capacity regime" before substitution takes place. BGGS "does not believe that the potential impacts have been adequately discussed by the industry…… or fully considered by the Regulator".
- EdF want a delay to "allow the industry to develop robust procedures that will allow the QSEC auctions to operate as intended".
- RWE consider that "option 1 would allow further time to consider these issues properly".
- Total believe that substitution is "significant enough to merit a thorough consideration of the risks involved and we believe this has not been allowed"
- CoP believes that "capacity substitution requires much fuller discussion".
- Eon "do not believe it is appropriate to introduce further changes to the QSEC auction at this late stage" and
- Exx think "there is a higher possibility of knock-on consequences that are not yet revealed" and it is "imperative that a complete industry-wide review ….. is carried out"

A number of respondents feel that the enduring process for transfers and trades must be known before capacity substitution is implemented.

- BGT "does not support the implementation of substitution until the enduring process for trades and transfers is clear".
- STUK "believe the implementation ….. would be premature …. With an enduring regime for transfers and trades likely to be implemented for October 2008".
- BGGS notes "that the current proposals for Transfer and Trade of capacity are for the period October 2007 to March 2008 only, prior to discussion of a more enduring regime".
- Total believe that " Substitution Arrangements should be considered in parallel to the Transfer and Trade arrangements……. As the enduring Trade and Transfer arrangements will not be discussed until April 2008, it seems hasty to implement…."

The potential adverse impact of substitution on Security of Supply is an issue for some respondents. Two respondents (EdF and Total) consider that National Grid NTS should not rely totally upon market based signals to trigger incremental capacity release and that other information should be considered as part of the process.

- BGT highlights the problem "of an ASEP with declining supply but with the potential for new developments……. Substitution could reduce the baseline at the ASEP and the requirement for additional capacity then has to be signalled and paid for at a higher price than otherwise would have been required". However,
- RWE "doubt the extent to which this [option 1] will create a significant barrier to entry for new projects". RWE acknowledges that "reviewing these arrangements next year will provide an opportunity to assess this more fully".
- STUK identifies that "the current IECR and substitution methodology does not take into account the changing profile of the UKCS and NCS fields".

- EdF considered that a benefit of the previous regime was that "NGG had the discretion as to whether to release incremental capacity even if the auction signals were not present". They are concerned with Ofgem's comments on the IECR. In particular EDF state that "in Ofgem's IECR decision letter they suggest that any incremental capacity that is released on a discretionary basis could be viewed as discriminatory, not in line with their licence conditions, and likely to be viewed as inefficient and therefore unlikely to be funded". EdF continues "By constraining NGG in this manner the UK's security of supply could be threatened".
- Total considers that substitution "can have such a significant impact on shippers and security of supply". Moreover they consider that "when analysing Substitutions National Grid should …….. include information made available to them through the Transporting Britain's Energy Process".

In regard to potential alternative tests for release of incremental entry capacity (i.e. option 3) respondents were in favour, at least until after further consideration, of retaining the existing NPV test regardless of whether requests are satisfied by investment or substitutions.

- STUK argues that deviation from "the existing NPV test" "could be considered to create discrimination between users".
- EdF believe that "maintaining the current NPV test remains the appropriate test …. for this September's QSEC auction".
- Similarly, RWE "do not believe it is appropriate to alter the current criteria for triggering release of incremental entry capacity at this time" and
- Total says "that it [substitution] should be undertaken only if the signals are there to justify such an action, we believe that the action could be justified only if the economic test detailed in the IECR is passed".
- CoP say that "application of the economic test is fundamental to any proposals".
- Eon "favours option 1…….. Unless NG is explicitly able to tell us what the lower than 50% hurdle would be, before the auction, then we could not support this".

Specific comments[8] have been made by respondents to some or all of the four options outlined. Generally these identify additional issues and support the respondents' cases for a delay to implementation of any substitution processes or, where substitutions are to be introduced, the option with potential for least adverse impact (option 1).

Additional comments were received from respondents, but these relate more to the impact of capacity substitutions as a principle rather than the timing of its implementation or the User commitment. These include:

- BGT is concerned with the impact on User bidding strategies if they have to bid to secure "peak" rather than "average" capacity levels.
- STUK is concerned with the potential for substitutions for short periods to "lock out" Users at certain ASEPs resulting in uneconomic investment for incremental capacity at the locked-out ASEP.
- BGGS is concerned that there is lack of clarity on the criteria Ofgem will use when deciding whether to approve a substitution.

8 See individual responses

National Grid NTS's Response

National Grid NTS welcomes respondents' comments on this consultation and continues to believe that its original proposal (option 1) not only satisfies its licence obligations but best meets the concerns and requirements of Users. National Grid NTS continues to believe that option 1 is the best approach.

However, National Grid NTS agrees that the implementation of such a fundamental change in the entry capacity regime as is presented by capacity substitutions requires thorough industry review. National Grid NTS has consistently stated that because capacity substitutions are permanent their impact will be much more significant than that of transfers and trades and hence should not be introduced without due consideration.

National Grid NTS welcomes, therefore, Ofgem's decision to postpone the requirement on National Grid NTS to implement entry capacity substitution for the September 2007 QSEC auction[9] as part of a broader entry capacity regime development project.

National Grid NTS acknowledges the support for the existing NPV test and continues with the opinion, until assessed further, that the same test should apply for the release of incremental capacity regardless of how that capacity is provided.

The economic test to be applied, and other issues raised (4.5, 4.7 and 4.8) will be issues for development as part of the project referred to in 4.11.

Changes to the Original Proposal in Light of Representations Made

Having considered the respondents' views, and taking into account the points put forward, National Grid NTS remains of the view that the original proposal, included and approved in the IECR, satisfies the licence obligations and best meets the needs of Users.

However, considering Ofgem's decision to postpone the requirement on National Grid NTS to implement entry capacity substitution for the September 2007 QSEC auction National Grid NTS will:

a) propose to modify the approved IECR Methodology Statement to delete paragraph 15 and the first three lines of paragraph 37 which state that National Grid NTS will consider whether entry capacity substitution can satisfy requests for the release of incremental entry capacity. However, the IECR Methodology Statement was drafted such that relevant sections would only apply if the Licence became effective as envisaged at the time of proposing the IECR Methodology Statement. National Grid NTS will issue a clarification note prior to making necessary amendments to the statement;

b) reconsider its proposals for Entry Capacity Substitution in the light of the proposed entry capacity regime development project and include any relevant changes as part of the review of the IECR in 2008.

9 Further consultation on NTS Entry Capacity Baselines, Ofgem letter ref 192/07 dated 27/07/07.

Table 1: Potential options for alternative incremental entry capacity release mechanism where Entry Capacity Substitution is available.

Options	Description	Advantages	Disadvantages
1. Current proposal in the IECR. (with review next year)	Substitution only applies where the current IECR test is passed. Experience is gained of the process and in reviewing its impact revised proposals may be brought forward for next year.	Provides a degree of stability ahead of this year's September QSEC. Allows time to fully consider and consult on the implications of changing the IECR test. Trade and transfer provides a route to manage the requirement and ensure the efficient and economic use of the system	The existing IECR test may create a barrier to entry for some projects. Trade and transfers may not provide the certainty that some projects require.
2. Extension of transfers (i.e. option 1 plus transfers for the shorter period)	It could be possible to extend the proposed capacity transfer process to cover the 42 month investment lead time. This would allow quarterly periods of capacity to be transferred, driven either through the QSEC or separate auction.	Allows capacity to be moved for a defined duration with no long term capacity destruction. Medium / long term capacity available for increased demand at the donor or for further transfers.	Significant development work required to determine transfer rates for each quarter. More distant transfers increase uncertainty. Short term implementation would be problematic. The transfer process is largely ex-ante unlike substitutions. Does not meet the objective of avoiding investment as it occurs within investment lead times.
3. Lower NPV test	Incremental capacity could be released where auction signals do not meet the 50% NPV test provided that the incremental capacity can be satisfied through substitutions.	Satisfies greater User demand for release of capacity where needed. Can be a simple test to apply where no investment is required. Transparent. Provides clarity of requirements before bidding in auctions for new ASEPs	Usually the ASEPs where substitution opportunities exist are not known in advance so bidding against a lower test would not guarantee release of capacity. A different test would need to apply where there is a mix of investment and substitutions; potentially confusing. Additional post QSEC network analysis. Need to distinguish between bids (i.e. existing test vs lower test, and bids satisfying the lower test). Lower test may be satisfied without long term bookings, so capacity may be substituted away again in the longer term. This would create greater uncertainty by maximising capacity movement and potential destruction.

4. Lower User commitment (with conditional auction bids)	Incremental capacity is only released where the current IECR test is passed, but where incremental capacity is met through substitution the relevant User commitment could be reduced according to conditions within placed bids. P_0 - P_n prices remain unaltered.	User commitment aligned to associated investment risk. Still provides certainty on capacity being released	Complicated with significant impact on systems. Reduces User's allocations, with the potential for the capacity to be substituted away during the period of the original bookings contained within the placed bids. Provides no benefit to "marginal" developments.

Annex 5: Baseline Re-consultation Workshops

96 A comprehensive summary of the three workshops held to develop understanding, and further review, of the Entry Capacity Baselines can be found on the Joint Office web site. This section further summarises that document, concentrating on those sections pertinent to capacity substitution.

Workshop 1: 14 August 2007

97 The objectives of the first workshop were to review the process that had been undertaken to set the current obligated entry capacity levels and to set out the timeline to review associated topics e.g. capacity substitution.

98 Ofgem explained the reasons behind the further consultation on NTS Entry Baselines and re-iterated their reasons for revising baselines. They then described the method by which the final baseline numbers were derived.

99 It was further explained that the final proposals for baselines were part of a total package which included:

- Incentives and obligations – particularly the Capacity Substitution and Transfer & Trade obligations to reduce the risk of capacity sterilisation and the risk of inefficient investment.

100 National Grid presented a timeline to correspond to the dates published in Ofgem's open letter. Overall the workshop participants seemed to think that although the timeline was challenging, it reflected a pragmatic approach.

Workshop 2: 17 August 2007

101 The objectives of the second workshop were to consider alternative methods of setting the Baselines and to consider the issue of "spare / sterilised" capacity (pertinent to the debate on substitution).

102 National Grid explored policy measures associated with a further consultation on Baselines, which broadly sought to address the treatment of spare / sterilised capacity. The elements discussed were:

- Capacity substitution
- Trade and Transfers
- 10% capacity held back for the shorter term
- IECR
- Charging

103 Ofgem clarified their understanding of "sterilised capacity". Capacity is potentially sterilised when demand for capacity is signalled in the vicinity of ASEPs where capacity is unsold. The incremental demand could use the network capability associated with that unsold capacity but it is sterilised unless National Grid is relieved of its obligations with respect to the release of that unsold capacity.

104 National Grid put forward 5 options that considered the potential implementation of capacity substitution and enduring Trade & Transfers. The options also addressed whether it was appropriate for more than 10% of the Baseline capacity to be excluded from substitution (as part of the methodology). The options ranged from a very dynamic capacity market, as

detailed in Option 1 “Fast and Furious” to a much more stable regime in Option 5 “Driving Miss Daisy”.

105 National Grid requested further written comments and feedback ahead of the third workshop. In particular comments on whether the full range of options had been captured and whether industry participants had an initial preference.

Informal Consultation Responses

106 Seven responses were received to the informal consultation. All of the consultation responses are available on the Joint Office website. A brief summary of the responses received and answers, where possible, to particular questions raised is provided in the Baseline Workshop Summary Report on the JO website. Summarised responses pertinent to substitution are provided in Annex 6.

Workshop 3: 12 September 2007

Objectives

107 The objectives of the third and final workshop included further development of the capacity substitution options.

National Grid Presentation – “Treatment of Spare / Sterilised Capacity”

108 National Grid summarised the Licence requirements with respect to substitution and indicated that National Grid was working towards implementing substitution for June 2008 (in accordance with the direction received on 5 September from the Authority). The implementation date may be revised subject to agreement with the Authority.

109 It was also discussed that Ofgem had confirmed that the requirement to only hold back the 10% of Baseline capacity for the shorter term auctions would remain, however they would keep this under review.

110 A brief synopsis was provided of the informal consultation responses. Overall there was not a general preference for one of the options presented as part of Workshop 2 (see Annex 6 section 9). However several responses suggested that more than 10% of capacity should be held back for the shorter term.

111 National Grid presented a further development of Options 2, 3 and 4, providing greater detail to that discussed in Workshop 2. The main issues that all of the options face is how to deal with future short term bookings e.g. a single quarter of demand for capacity. Should the capacity before this point be considered sterilised or should other mechanisms be applied? One solution proposed was that Shippers should be able to “surrender” the capacity and receive remuneration linked to the avoided investment.

112 Generally there was support to further develop the elements of the options, but not necessarily as distinct options. This would allow the individual elements to be debated and selected.

Summary of Baseline Re-consultation Workshops

113 National Grid conducted a process to examine the setting of Baselines and associated topics. The process involved full stakeholder engagement through both workshops and written responses.

Baselines

114 The outcomes of the process were:

a. a greater understanding of the process used by Ofgem in setting the 2007-2012 TPCR Baselines
b. a suite of alternative methods to allocating the current aggregate Baseline figure of 8814 GWh/day.
c. a preliminary view on the implications of aggregate Baselines above the 8814 GWh/day

115 The next steps in the process were for Ofgem to take forward the models developed and to determine any further information required in order to undertake a formal industry consultation. This consultation is now underway.

Associated Topics

116 A timeline was developed which set out the timetable to consider topics associated with a potential revision of Baselines. An updated version of this timeline is provided in Annex 7. The timetable for implementation of capacity substitution will be heavily influenced by whether the substitution obligation is postponed to align with the re-scheduling of QSEC auctions should UNC modification proposal 0189 be implemented.

117 A number of the workshop participants suggested that certain associated elements, for example substitution and the 10% capacity held back for the shorter term, should form part of the consultation on Baselines. This was a matter that Ofgem considered in their consultation process.

118 The three workshops considered 5 options, which initially covered both substitution and transfer and trades. However in the final workshop only substitution options were considered. No consensus was reached in the workshops; however the discussions and comments provide a sound basis to take forward the work in these areas. For convenience Annex 8 details the 5 options considered.

Annex 6: Baseline Re-Consultation Workshop: Informal Consultation – Selected Responses

119 Representations were received from the seven respondents listed below. Full responses and National Grid's full summary and replies can be found on the Joint Office web site. For this Annex only comments pertinent to the substitution obligation are provided. These comments and responses have been reproduced without alteration to reflect different terminology used at that time or to update for recent developments and revised understanding of the issues discussed.

E.ON UK plc (EON)
Centrica Storage
Statoil (UK) Ltd (STUK)
Scottish Power (SP)
Excelerate Energy (two responses) (EE)
BG Gas Services Limited (BG)
Exxon Mobil Gas Marketing Europe (EM)

Party	Issue	Response Quotes	National Grid NTS ("NG") Response
1 – Baseline Setting / Allocation Methodology			
BG	Basis for setting Baselines	1.6 - The issue of substitution methodology cannot be considered in isolation from the aggregate level of baselines. NG has asked for comments on how to allocate the 1554 GWhd of unallocated capacity. However this ignores the question of whether the aggregate level of the baselines is correct. There has been a significant shift from a regime where NG had high baselines but no substitution. If substitution is limited, and this is coupled with new lower baselines, this means that NG is facing much lower risk than in the previous regime. Therefore if substitution is limited to resolve the problems outlined above, it needs to be accompanied by higher baselines to maintain the same level of risk.	Substitution is based on the physical capability of the network and therefore is unaffected by the actual level of Baselines. Therefore we disagree with the view that if substitution is limited this should be accompanied by higher baselines to maintain the same level of risk. However from a User's perspective, we can understand the desire to see the complete package and therefore have progressed the debate on substitution and other associated topics in parallel with the further consultation of Baselines.
2 – Security of Supply			
SP	Impact on flexibility of operations	2.1 - From a security of supply perspective, we also believe sufficient capacity should be available at individual ASEPs to allow maximum withdrawal and ensure optimal flexibility for the system.	Where capacity bookings have been made or incremental capacity triggered, capacity will be made available to these levels. However where User commitment does not exist, it would seem inappropriate to simply reserve all of this capacity and sterilise the associated capability that could have been made available at other ASEPs.

ExM	Need for flexibility	2.2 - We support the requirement for the System to be managed in an economic and efficient manner but we think there is a risk that the flexibility for shippers to bring gas into the System from various sources will be lost if capacity investment is too rigidly restricted and there is no 'slack' in the system at all. Therefore a balance must be struck that allows shippers a level of certainty about the capacity available to be booked on a long or short term basis at any given entry point whilst at the same time allowing National Grid NTS to substitute capacity rather than invest in additional pipe when it is appropriate to do so.	NG will develop proposals that satisfy its licence. The licence does not envisage “slack” and the requirement for NG to use reasonable endeavours to substitute capacity naturally will lead to a tighter system. The form in which the substitution obligation is implemented will have a significant impact on the availability of capacity in the short and long term. NG will undertake a full and comprehensive consultation on the implementation.
STUK	Emergency	2.3 - The impact of the proposed changes on security of supply cannot be understated. If there is sub-optimal infrastructure to transport the gas throughout the network, this could directly lead to a system emergency with associated consequences. Even if a 1 in 20 supply scenario is not experienced, if insufficient capacity is made available to allow gas to flow to the UK, Ofgem have previously stated the cost to consumers of gas not being made available to the wholesale markets to be billions of pounds.	
Eon	10% / 20% rule	2.4 - We would strongly advocate a move back to the 20% of capacity held back rule. This would allow much more flexibility for capacity holdings to be optimised closer to when the capacity is actually needed. Forcing shippers to commit to buying large amounts of long-term capacity which ultimately may not necessarily be needed is not always the most efficient option and although trades and transfers aims to mitigate this inefficiency, the process simply requires shippers to go through the administrative burden and expense of regularly offering it back up for sale for trade and transfer in short term auctions. We believe, as a result, that the market could be much optimised better by a move back to the ‘20%’ rule.	NG agrees that increasing the amount of capacity held back will increase flexibility and hence help some specific developments that rely on short term capacity bookings. However, increasing the level to 20% would also potentially sterilise more capacity than would otherwise be made available to the wider market. Although a change to the licence would be required to hold back more than 10% from the QSEC auction it may be possible to exclude a different proportion from the obligation to substitute. This will be considered as part of the consultation on capacity substitution.
BG	10% / 20% rule	2.5 - One way of ensuring that there was sufficient capacity for the short term would be to increase the percentage of capacity held back for the AMSEC auctions to more than the previous figure of 20% given that in the old regime unsold QSEC was guaranteed to be available in the AMSEC auctions; with substitution this is no longer the case. Alternatively there could be a maximum of capacity that is available for substitution in addition to any rules	

		concerning retention of capacity for the AMSEC auctions. This would help ensure there was a level playing field between different sources of gas for the UK.	
ExM	10% / 20% rule	2.6 - We also have concerns about "all available capacity being subject to substitution", if the definition of "available" is taken to be all capacity which has not been sold in long term auctions. We believe that there should be a sensible definition of what is 'spare' capacity because we think it is risky to assume that all capacity that is unsold at the present time will never be needed at that entry point at some time in the future. …… It may therefore be appropriate to increase the 10% of withheld capacity and to exclude this from the substitution process so that smaller projects could be assured of being able to secure entry capacity.	See 2.2 & 2.3
EE	10% / 20% rule	2.7 - a sufficiently large proportion of that [Teesside] capacity is held back for shorter term auctions including day ahead auctions;	See 2.2 & 2.3
ExM	Stranding	2.8 - Whilst we believe that shippers who are undertaking large investment projects can and should signal their capacity requirements through long term user commitment substituting all unsold capacity away from an entry point could jeopardize smaller future developments which would be unable to pass an NPV test for incremental capacity at an entry point where capacity is currently available. This may have the effect of stranding indigenous gas and preventing UK gas producers from developing small fields or maximizing the use of offshore infrastructure.	NG understands the issue put forward, however under the current regime new / incremental developments should signal long-term commitment in the QSEC auction. Where this is not possible there can be no guarantee of capacity being made available. However, the trade and transfer obligations and the 10% capacity held back, provide additional flexibility to acquire capacity outside of QSEC.
BG	Stranding	2.9 - BG is concerned that Substitution increases the risk of stranding UKCS gas reserves. New UKCS fields will not necessarily be able to book capacity in a timely manner in the long term QSEC auctions before substitution has occurred, which is the only way to guarantee that capacity will be at an entry point in the future. Nor will such fields be able to book sufficient capacity to trigger the release of incremental capacity under the IECR rules, once substitution has occurred. The reasons for this are *[see complete response for detail on each topic*]. **Uncertainty** **Lead time**	

		Field life and Plateau **Economics of small fields / incremental investments** The Substitution mechanism may create a set of commercial rules which will inhibit the exploitation of remaining UKCS reserves. This could have a significant impact on gas supplies to the UK.	
3 – Process / speed of reform			
ExM	Timing of introduction of reform	3.1 - Our caution is that the approach to this work must continue to keep in mind the marginal nature of the new services envisaged relative to the base services already in place. It is important that key principles established in 2002 are not undermined. Also, any new arrangements that optimize investment on the network and which increase competition in capacity must be thoroughly tested for potential adverse effects on UK security of supply. We think it appropriate to approach substitutability on a measured basis and allow for relevant new market information to emerge.	NG agrees that the consequences of a change to Baselines and the introduction of capacity substitution processes could be substantial and agrees that any change should be measured and controlled. However, NG is obliged through its licence to develop processes to specific deadlines. Should Ofgem consider delays are appropriate to allow greater review, then this would be for Ofgem to determine. The current review is part of the process to further consult on baselines and capacity processes. Involvement of all Users is therefore, encouraged. Before any change can be implemented industry will be consulted on any necessary changes to NG's licence, UNC Mods and on NG's proposed entry capacity substitution methodology. (See also 3.4 below).
EE	Timing of introduction of reform	3.2 - We have reviewed the comments made by shippers following the August workstreams and the discussion at the 12th September session and do not believe that the implications of substitution are fully understood by market participants. The operation of Substitution is complex and can cause major asset stranding. A full understanding of the implications of Substitution is fundamental to any consultation process.	
EE	Upstream/ international impact	3.7 - Excelerate believes that the new regime will require Capacity Substitution arrangements that take into account the Excelerate business model and the interconnectivity of UK and US markets as a result of the LNG trade.	Any proposals from NG for capacity substitution will be subject to full industry consultation.

BG	Change / certainty	3.11 - it is worth noting the potentially significant changes that have occurred to the entry capacity regime. Under the 2002-2007 Price Control there was a widespread understanding (encouraged by Ofgem) that there would be stability to the regime for entry capacity, in particular for entry capacity baselines. Changes to baselines would be as a result of shippers booking capacity. The set level of baselines meant that shippers had the assurance that a given level of capacity would always be available to the market. If capacity was not sold out shippers had several opportunities to book it. At any one entry point shippers only had to worry about likely flows into that terminal, and hence likely usage or bookings of entry capacity.	NG is responding to specific obligations in its licence to develop substitution processes and has worked with Ofgem to determine appropriate baselines. NG does agree that changes should be subject to full industry consultation, signalled well in advance and where appropriate supported by an impact assessment.
5 – Discrimination / competition			
SP		5.1 - The result is that some ASEPs are now in a highly unfavourable position with respect to long term capacity holdings in comparison with those established post 2002. Any new trades and transfers/substitution methodology introduced could exacerbate that disadvantage.	NG has rights and obligations set in its licence in respect of entry capacity baselines. It is important therefore, that NG and Ofgem agree appropriate values. In setting these values it will be necessary to ensure that there is no undue discrimination. In addition, the licence sets out obligations with respect to capacity substitution. The basis of substitution is to move baseline capacity from ASEPs where it has not been booked to those where incremental capacity is required, thereby avoiding the need for investment by NG. Hence, if higher baselines are agreed they will be subject to substitution to other ASEPs if not booked in the QSEC auction as the whole concept of substitution does not work if there is a standing assumption that all un-booked capacity will subsequently be used. The key issue is therefore, to determine how much capacity, if any, should be excluded from the substitution process and held over for shorter term auctions to support the market sectors referred to by SP/BG and EE. See also response issue 2; “Security of Supply”.
BG		5.2 - if the changes go through, the entry capacity regime will favour those who are able to book for several years in the long term (QSEC) auctions…..this may not be desirable from a UK wholesale gas market point of view. The different proposals on Substitution affect the scale of this impact on shippers. Changes to the commercial rules governing entry capacity that restrict the ability of UKCS gas to enter the system would not, prima facie, appear to be conducive to encouraging competition in the wholesale market……. In particular BG is concerned that the effect of the proposals will be to favour large scale projects, in particular import projects, simply because of their ability to book large quantities on a long term basis.	

6- Limits on Substitutions			
Eon	NPV test	6.1 - We do not feel it is necessarily appropriate to have the same NPV test as for the QSEC auctions. Our initial thoughts are that no NPV test or a different NPV test should apply, although we would like to see more evidence on the impact this could have in terms of capacity actually being moved through substitution.	NG notes the comments from Eon and also the reservations put forward by ExM and STUK (6.2 and 6.3). This will form part of the substitution consultation.
ExM	NPV test	6.2 - We have concerns about the removal of the NPV test. It is our understanding that it is the signal for investment at a given entry point, supported by bidding which passes the NPV test, which is the trigger for National Grid NTS to investigate whether or not the capacity requirement could be fulfilled by substitution rather than by investment, therefore if the NPV test is removed we do not understand how the substitution process will be triggered. Also, if, following such an investigation, it is discovered that the capacity cannot be provided by substitution, how will investment at that entry point be signalled without an NPV test? If a lower NPV test is introduced (as suggested in Options 2&3) does this mean that a two-tiered system would operate, whereby a high test would be applied where investment is needed and a lower test applied where substitution would apply? If so how would shippers know in advance whether or not substitution could be applied and which test they would need to pass in order to guarantee the capacity they require?	NG agrees that it is through the existing NPV test that NG is obliged to release incremental capacity and will initiate appropriate investment. NG believes that the financial commitment provided by Users in passing the NPV test is not intended to underwrite the specific investment (which may be zero in the event of substitution). Users use NTS assets which have a cost associated with them whether they are incremental or existing assets. Other than for new ASEPs, subject to an individual auction, NG does not understand how a User can know whether incremental capacity will be met by investment or substitution. Hence, where a User genuinely wants incremental capacity bidding against a lower “substitution NPV test” runs the risk of not being allocated the incremental capacity due to there being no spare capacity available for substitution. It is only after bids have been analysed that substitution opportunities can be confirmed. At this stage it may be appropriate to offer a “refund” or allow revised capacity commitments (e.g. reduced duration) to the successful Users whose incremental requests are satisfied through substitution. However, all of the above aspects will form part of the substitution consultation. Several of these aspects have already been discussed in the development of the substitution options discussed in the workshops.
STUK	NPV test	6.3 - STUK would expect that some form of NPV test is needed to give the participants an appropriate level of information and transparency to allow them to adequately bid in the Entry Capacity Auctions. If there is no NPV test, we do not understand how a Shipper would be able to know what level they would be required to bid to signal the release of incremental entry capacity.	

EE	Exchange rate cap	6.4 - NGG's current methodology of one to one exchange rates in the Northern Zone should remain in place	In enacting the substitution and transfer and trade obligations, NG must take account of the physical capability of the network; where this allows a 1:1 ratio to be applied; NG will seek to do so.
EE	Exchange rate cap	6.5 - Capacity must be efficiently used. If, for example, 20 MCMD at one entry point only provides 2 MCMD at another ASEP in a different zone, then this should not be allowed as the drawback resulting from a loss of 20 MCMD is greater than the benefit of the 2 MCMD.	NG shares the concerns expressed regarding capacity destruction. Unlike Transfers and Trades any capacity substitution is permanent. Hence NG believes that an initial limit should apply for substitution, this limit will need to be determined through the consultation process.
STUK	Exchange rate cap	6.6 - The risk of capacity destruction occurring through high exchange rates impacting on security of supply and the free flow of gas to the UK market requires careful study. NGG has raised the prospect of an exchange rate cap to mitigate some of this risk. STUK believes a cap of this kind may help to reduce the likelihood of inefficient network operation resulting from the transfer of capacity from location to location. The exact nature and level of any potential cap should be the subject of economic analysis to inform the discussion.	
9 – Preferred Option (1 = "Fast and Furious"; 5 = "Driving Miss Daisy")			
Eon	Preference	9.1 - at the moment we are tentatively leaning towards the NG suggested Options 1 or 2 for substitution. However, unlike trades and transfers, the industry has not yet seen any significant data to help them work through the options, so it would be extremely useful if NG could come to future Transmission Workstreams with concrete worked examples, as per trades and transfers.	NG acknowledges the diverse range of preferences. Respondents do not feel able to fully commit to any option but there is greater inclination to limit the scope of substitutions, at least in the short term. Options will be further developed and consulted upon.
ExM	Preference	9.2 - The capacity substitution proposal in Option 4 seems to offer a workable solution, however shippers bidding to pass the NPV test, whose capacity requirements were subsequently met by capacity substitution may be considered to have paid too much for their capacity and a refund mechanism for the affected shipper(s) might be appropriate to balance revenue recovery to target.	

STUK		9.3 - STUK have considered the high level options provided by NGG and believe that at this time all options should be discussed provided they can be developed to meet certain standards. Those standards are as follows *[see response letter for detail]* : Transparency, Stability, Reduction in Capacity Levels, Timing and Period of Auctions and Measurable.	
BG	Preferred option	9.4 - BG would favour options that do not make substitution too easy. At the least substitution should require the same types of test as the trigger of release of incremental capacity. This would indicate either Option 4 or Option 5 of the Options presented.	
11 – Miscellaneous			
BG	UIOLI	11.6 - Consideration should also be given to the issue of Use it or Lose it. For example capacity may be substituted to a recipient terminal, taking capacity away from the donor terminal. If the substituted capacity is not used however, there is no means for shippers at the donor terminal to access the unused capacity, even though they would have been able to do so if the capacity had not been substituted. It would be ironic if Substitution led to increased sterilisation of capacity.	This is an issue that would warrant further consideration in the development of the enduring trade and transfer process.

Annex 7: Possible Timelines for Entry Capacity Substitution

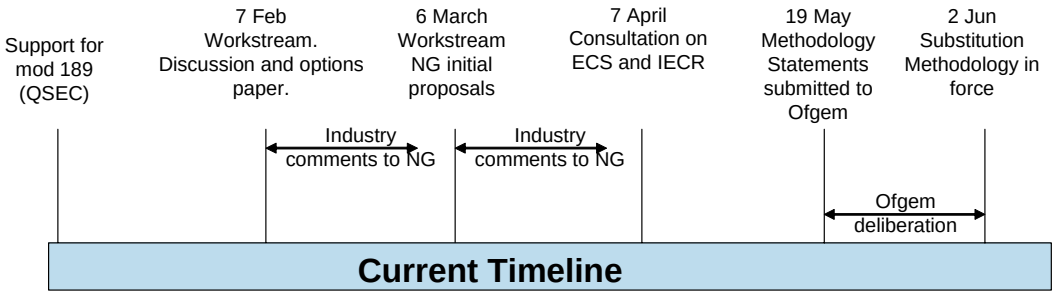
120 At the Transmission workstream meeting on 3rd January 2008 National Grid presented potential timelines for the introduction of entry capacity substitution. The two alternatives are subject to whether the obligation to implement the substitution obligation is delayed until later in 2008.

121 UNC modification proposal 189 will, if implemented, move the QSEC auction from September to April. The next QSEC auction would then be held in April/May 2008 under existing processes (e.g. no substitution). With the subsequent auction being in April 2009 National Grid feels that, if this would be the case, it would be unnecessary to develop substitution processes to the existing deadline of 19th May 2008. A further delay will allow much greater consideration of potential consequences and agreement of more robust business rules. Hence National Grid will be approaching Ofgem with a view to realigning its obligations to review the IECR and to introduce a capacity substitution methodology to the revised QSEC auction dates.

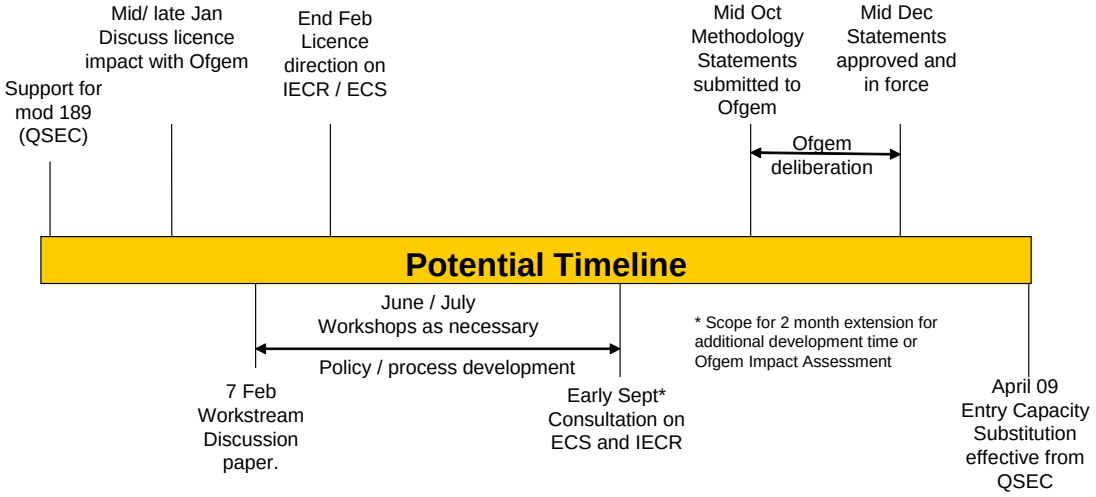
122 National Grid anticipates a decision from Ofgem to coincide with the section 23 notice on revised baselines in late February. Unless this notice is received National Grid will continue to work to the shorter timetable.

123 Updated timelines are presented below.

Ofgem unsupportive of moving Substitution obligation to April 2009



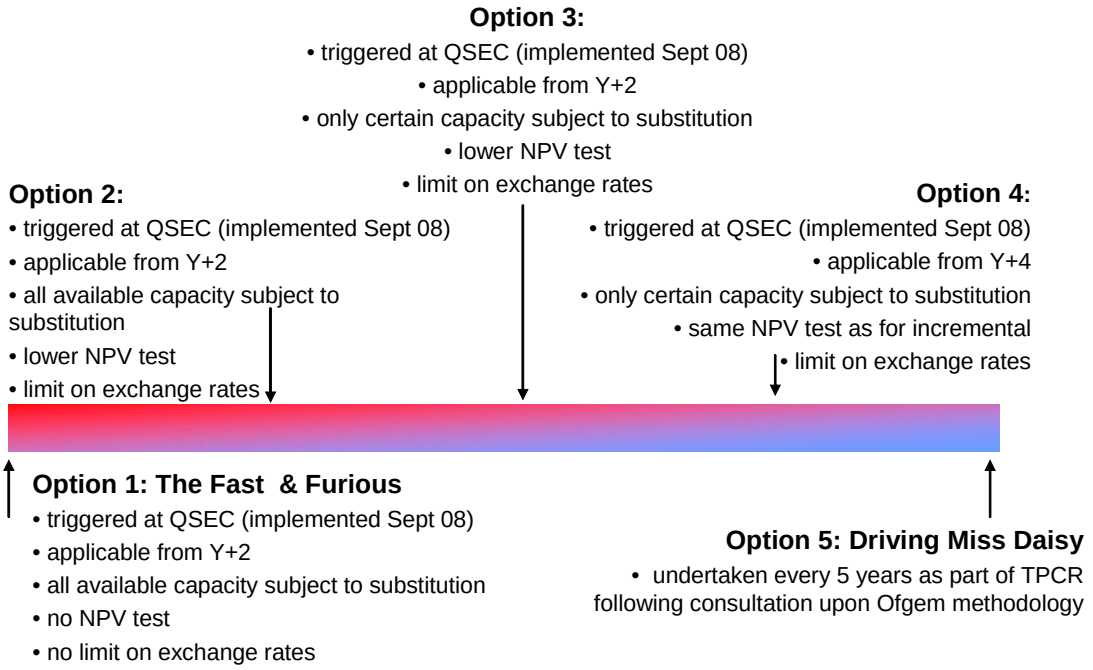
Ofgem support for moving Substitution obligation to April 2009



Annex 8: Substitution Options

Range of Options

124 A range of options were considered as shown in the diagram below.



Expansion of Substitution Options

125 The elements within the substitution options identified were considered separately:

When should substitution take place?

126 It was proposed that substitution should be linked to the QSEC auction, at present this would mean that substitution would take place in September 2008. However as the obligation would become effective on the 2 June 2008, it would be necessary to consider how, or if it would be appropriate, for substitution to apply to separate auctions held for new entry points.

What capacity should be able to be substituted?

127 The options in this area largely range from all capacity that has not been booked and that is not held back to the shorter term to devising a sliding scale mechanism to determine this value. In considering the sliding scale, two parameters were proposed the level of capacity bookings and the degree of historical usage.

How to deal with limited future bookings i.e. one quarter?

128 One of the challenges in considering how capacity substitution should be applied is dealing with limited capacity bookings in the future. In effect these could act to sterilise all capacity at this level prior to the booking. A number of options were discussed on how this could be addressed:

- Accept that this booking is a signal that capacity prior to this booking is required and therefore is not “sterilised”
- Remunerate National Grid NTS to cover the buy back risk associated with the limited booking
- Alter the nature of the substitution obligation to make substitutions time limited
- Place a minimum limit for capacity bookings e.g. above one quarter on capacity bookings in long term auctions
- Provide a surrender mechanism allowing the Users that have booked the capacity in question to surrender the holding and be remunerated for it.

Exchange Rates

129 There was a general consensus in the previous consultation on the substitution methodology that there should be a limit on exchange rates to avoid capacity destruction. In order to set an appropriate limit further information via examples should be considered.

NPV Test

In terms of considering the application of an NPV test, the range of options varied from no NPV test through to the same NPV test as used for the release of incremental capacity. There was a significant differences in views, with support at either end of the spectrum.

Allocations

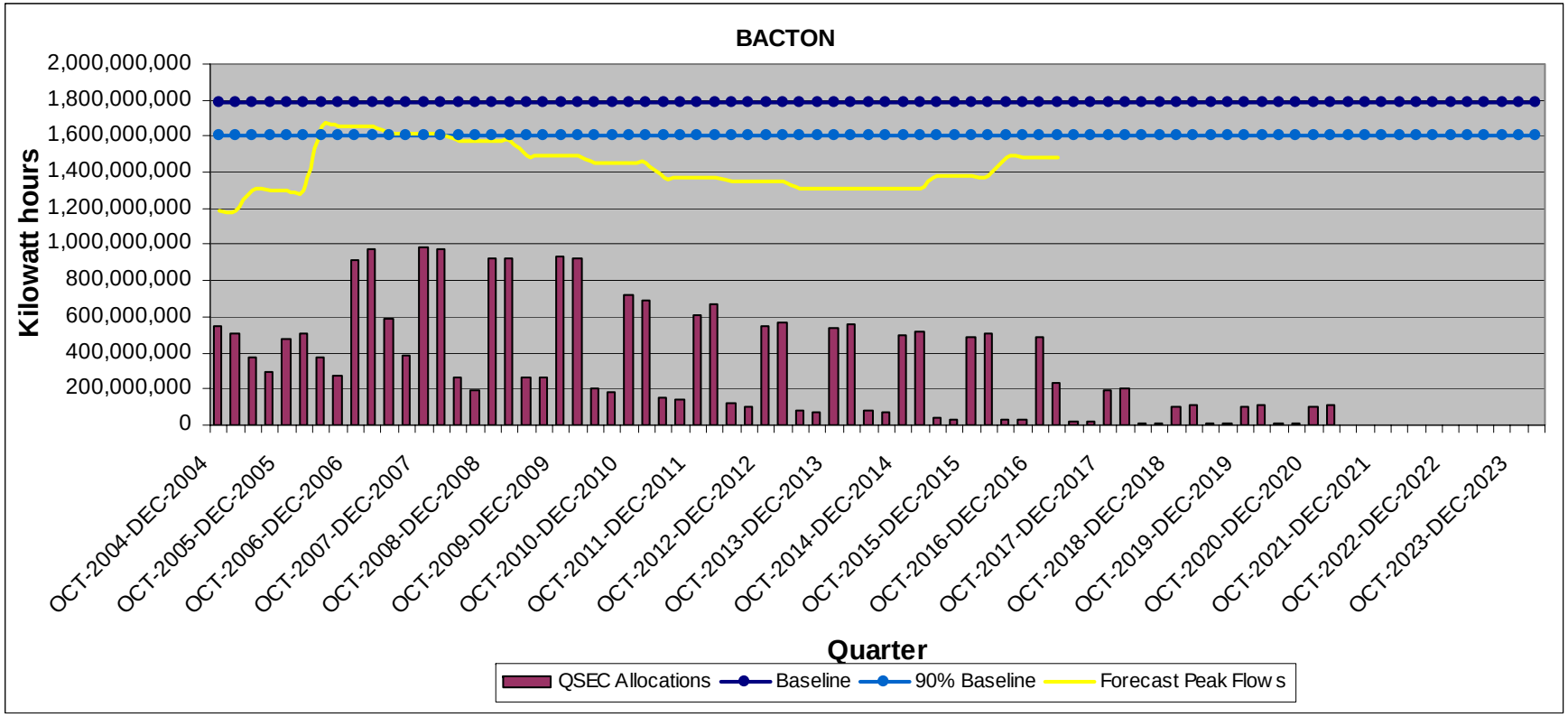
130 With regard to the allocation of capacity within the QSEC, a model was proposed that undertook the allocations in three tranches:

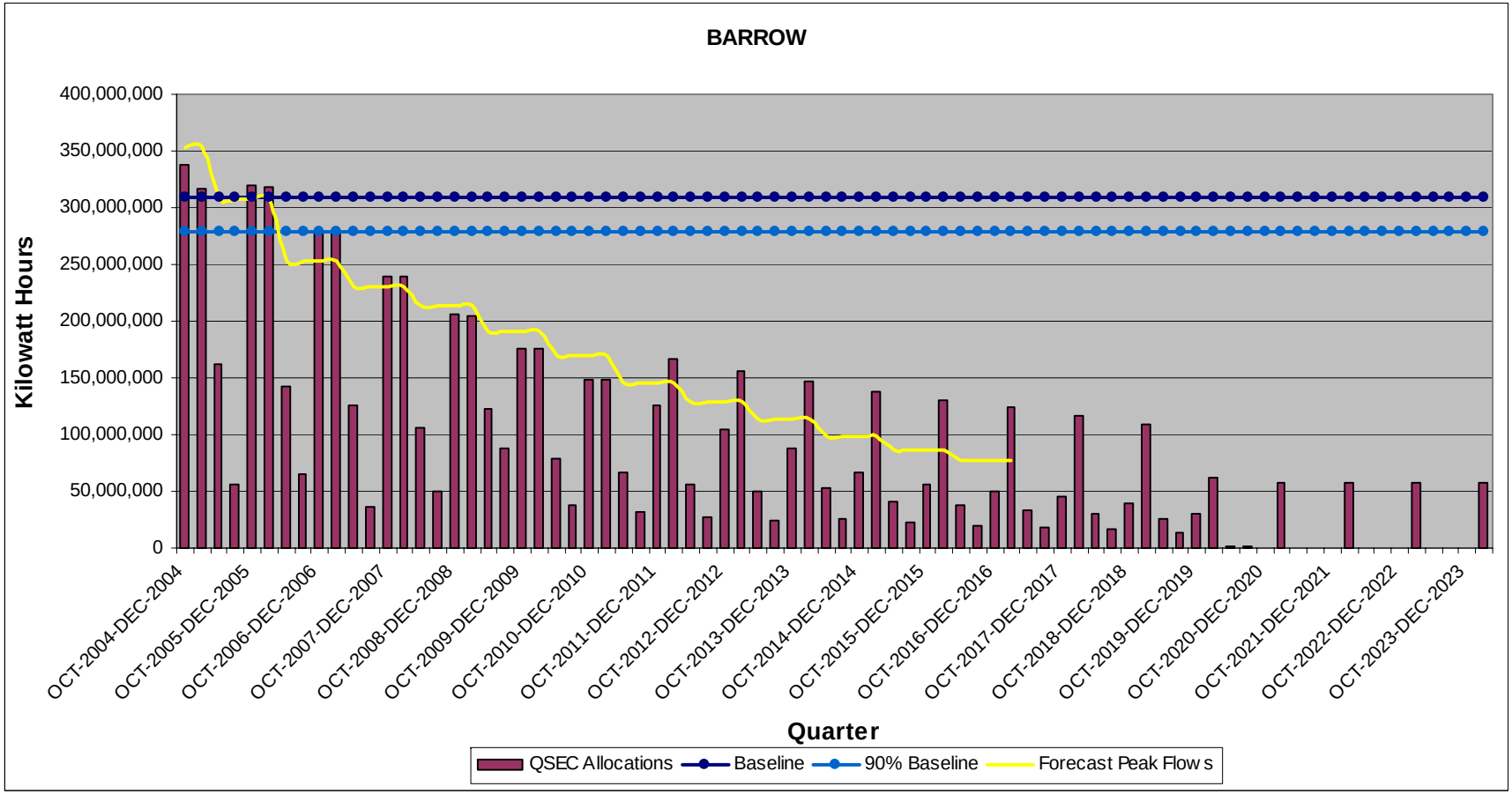
- Obligated capacity bids
- Incremental capacity bids that meet the IECR test
- Incremental capacity bids that fail to meet the IECR test

131 In order to differentiate the “substitution” bids in the third tranche it was proposed to rank the bids against the full IECR test i.e. bid value compared with estimated project value.

Annex 9: Analysis of Capacity Allocations against Baseline Quantities

132 The graphs below show aggregate capacity allocations at several ASEPs. Also shown is the forecast flow at these ASEPs. From this data, the quantity of capacity that is vulnerable to substitution can be seen, i.e. below the 90% baseline but above allocations (or forecast).

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QSEC Allocations
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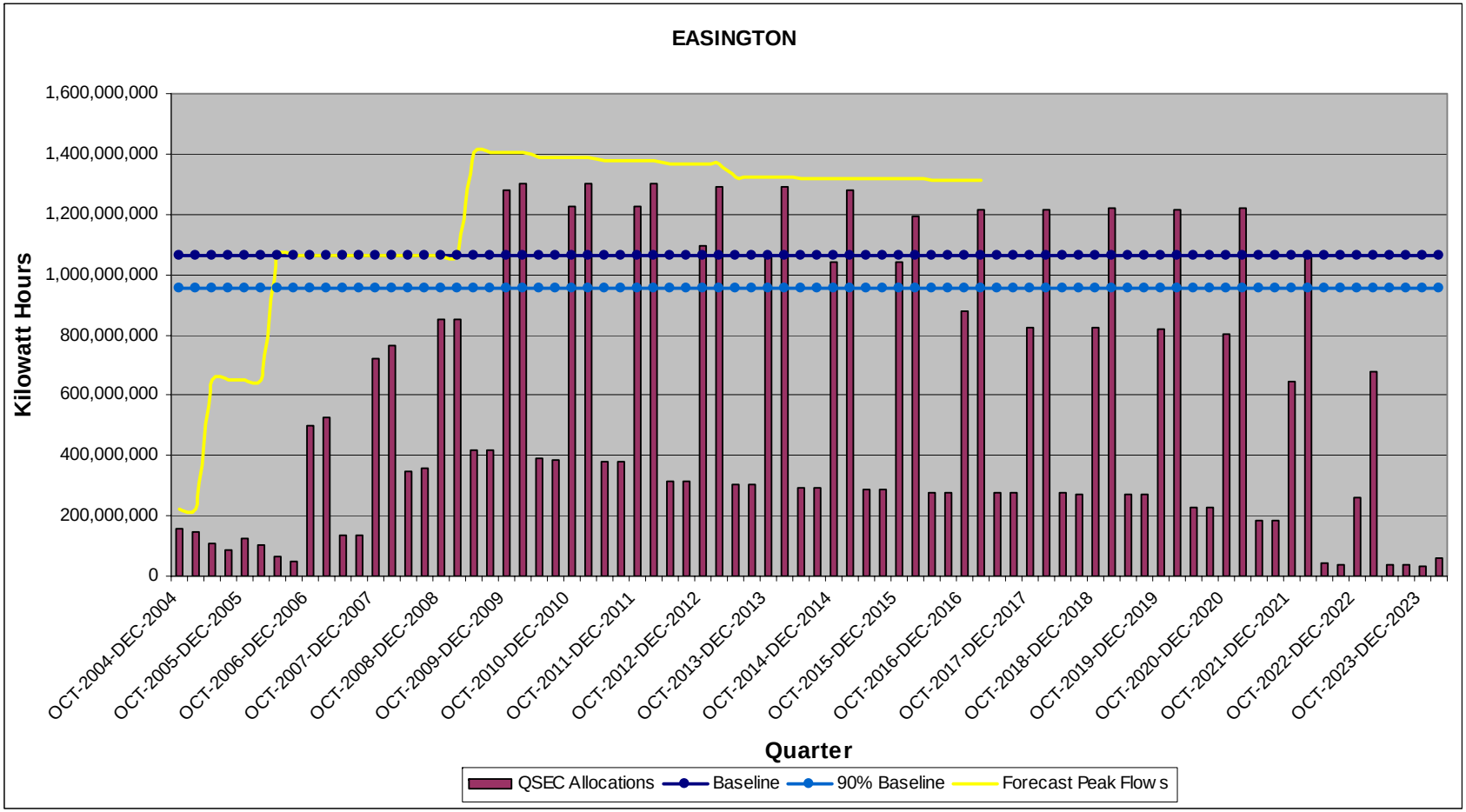
90% Baseline
Forecast Peak Flows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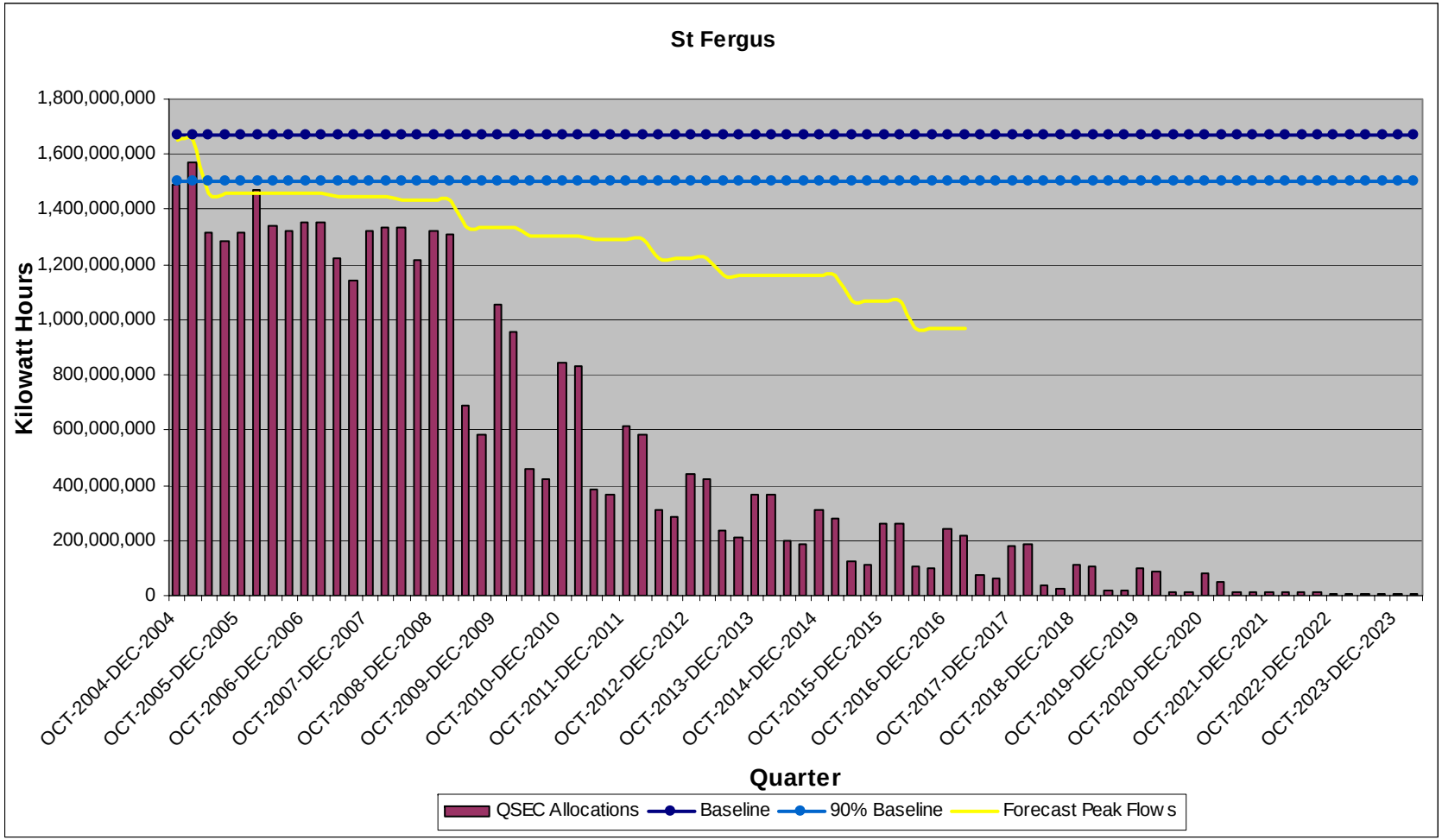
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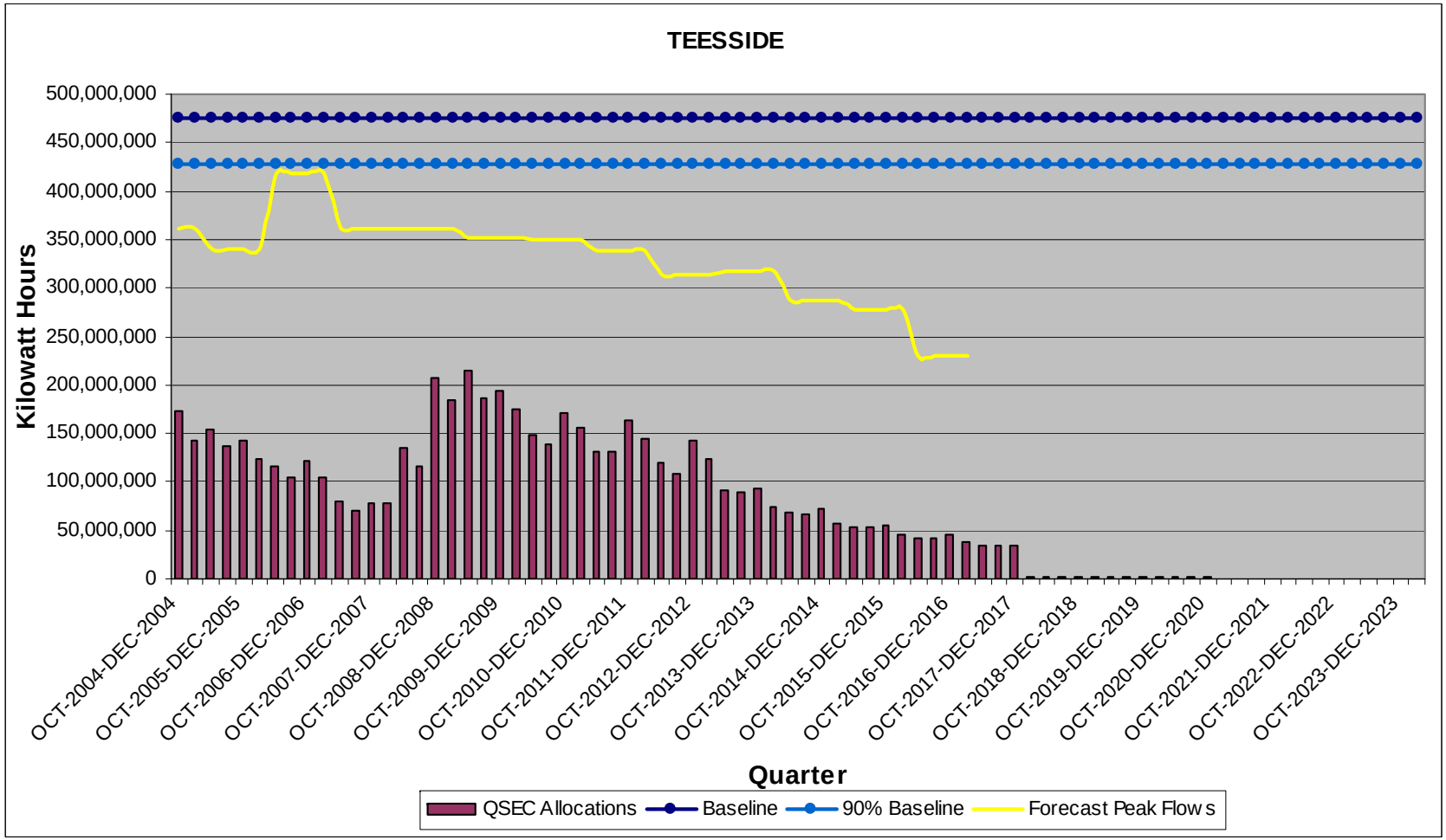
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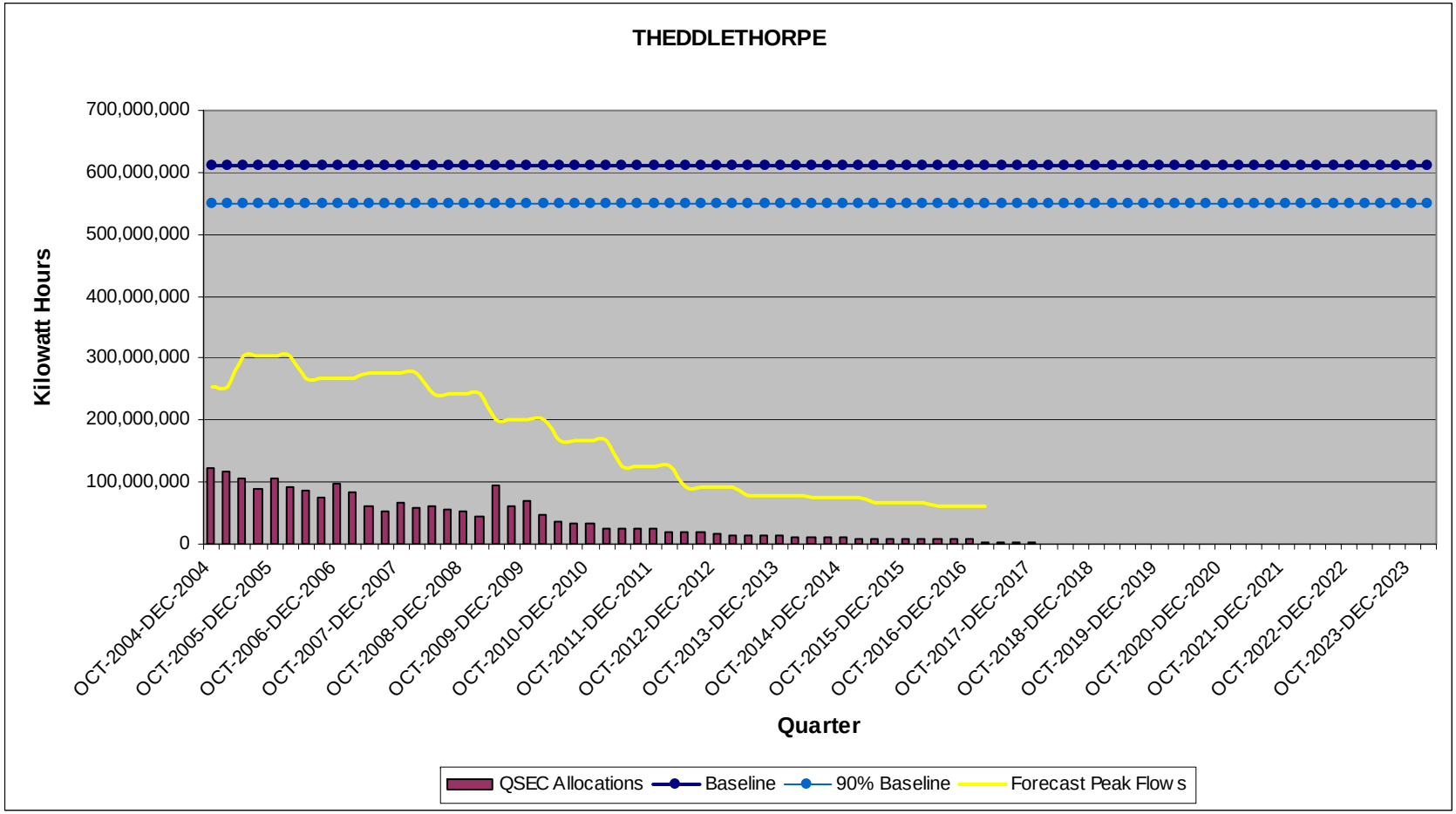
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