~~Approved~~For Consultation

Issue	Revision
4.2~~0~~	~~Approved~~For Consultation

nationalgrid

Entry Capacity Release Methodology Statement

Effective from ~~31st July 2017~~dd mmm 2019

ENTRY CAPACITY RELEASE STATEMENT

Document Revision History

Version/ Revision Number	Date of Issue	Notes
1.0	July 2002	
2.0	August 2003	Minor clarifications and price schedules for new entry points (Milford Haven and Barton Stacey) included
3.0	July 2004	Minor clarifications, price schedules removed to now only appear in the Transportation Statement
4.0	July/August 2004	Changes following consultation responses
4.1	July 2005	Proposed changes consultation
5.0	August 2005	Proposed changes agreed
5.1	14 September 2005	Proposed amendment to include formal consent process prior to adjusting investment lead times
5.2	30 September 2005	Final proposed amendment to include formal consent process prior to adjusting investment lead times incorporating consultation representations
6.0	6th April 2006	Proposals for the introduction of a methodology for the determination of investment costs
6.1	11th May 2006	Final proposals for the introduction of a methodology for the determination of investment costs
6.2	3rd May 2007	Proposals to generate step prices from Transportation Model (following implementation of GCM01) and revise economic test. Updated to reflect Transmission Price Control Review Final Proposals. Format changes and general updating.
7.0	12th June 2007	Changes following consultation responses
7.0	16th July 2007	Authority approval

7.1	May 2008	Revised terminology to be consistent with new Licence drafting; diagram added to describe different capacity terms. Consistent with changes to the Licence, the emphasis has been changed to one of release of capacity instead of investing to deliver capacity. Changes of a minor nature to improve clarity or readability. Updating of references to Entry Capacity Substitution. Use of "prevailing" to acknowledge potential changes to obligated capacity levels. Reference to "project costs" changed to "project value" in respect of the provision of incremental capacity. Clarify Licence requirements before capacity is made available at new ASEPs and the role of the Authority in approving National Grid's proposals. Clarification of processes for release of capacity under the "Accelerated Release" incentive.
7.2	June 2008	Minor changes following industry consultation to improve clarity.
8.0	July 2008	V7.2 approved by the Authority.
8.1	August 2008	Amendment to error in final table of Appendix 2
8.2	May 2009	Annual review and update. No changes made affecting the release of incremental capacity. Administrative and clarification changes made, specifically: • Removal of Appendix 1 which would have duplicated the 2009 Charging Methodology Statement which has been revised to include derivation of step prices. • Clarification added to sections on timing of release of capacity.
8.3	June 2009	No further changes following consultation. Submitted to Authority for approval.
9.0	15 July 2009	Authority Approval
9.1	October 2009	Amendment to minimum incremental step size for new ASEPs and minor clarifications to the same section.
9.2	13th November 2009	No further changes following consultation. Submitted to Authority for Approval
9.3	14th January 2010	Authority Approval

10.1	01 October 2010	Annual Review Consultation Draft. Requirement for ASEP to be included in the Licence and for Revenue Driver introduced. Update for entry capacity substitution. Reference to UNC modification proposal 246 (security) deleted following notice of non-implementation.
10.2	November 2010	No further changes following consultation. Submitted for Approval
11.0	December 2010	Authority Approval
11.1	September 2011	Annual Review Consultation Draft Minor updates
11.2	November 2011	No further changes following consultation. Submitted for Approval
12.0	December 2011	Authority Approval
12.1	October 2012	Annual Review Consultation Draft. Enhanced role for PCAs to enable delivery of capacity to required release dates without need to play permits.
12.2	November 2012	No further changes following consultation. Submitted for Approval
13.0	December 2012	Authority Approval subject to a number of minor clarifications.
0.1	July 2013	Updated for RIIO-T1. New terminology and Licence references; extended to cover non-incremental capacity release. Revised version number to reflect wider scope. Additional paragraphs to cover potential implementation of UNC Modification 0449
0.2	September 2013	Minor changes following industry consultation to improve clarity and correct drafting errors.
1.0	October 2013	Authority Approval
1.1	September 2013	Annual Review (informal consultation) Updated to align to Modifications: 0452: Introduction of the Planning and Advanced Reservation Capacity Agreement (PARCA) and 0454: Introduction of a Long Term Non Firm Capacity Product

1.2	December 2014	Annual Review (formal consultation) Updates following informal consultation. Further review to align to Modification 0465V: 'Introduction of the Planning and Advanced Reservation Capacity Agreement (PARCA), Weighted Average PARCA Security' and the revised Licence arrangement.
1.3	January 2015	Minor Changes following industry consultation to improve clarity Submitted for Approval
2.0	February 2015	Authority Approval subject to a number of minor clarifications.
2.1	December 2014	Informal consultation Updated to align to Modifications: 0500: EU Capacity Regulations - Capacity Allocation Mechanisms with Congestion Management Procedures and 0501: Treatment of Existing Entry Capacity Rights at the Bacton ASEP to comply with EU Capacity Regulations or 0501A: Treatment of Existing Entry Capacity Rights at the Bacton ASEP to comply with EU Capacity Regulations, including capacity return option or 0501B: Treatment of Existing Entry Capacity Rights at the Bacton ASEP to comply with EU Capacity Regulations, including a restricted capacity return option or 0501C: Treatment of Existing Entry Capacity Rights at the Bacton ASEP to comply with EU Capacity Regulations, including a capped capacity return option and an aggregate overrun regime and the draft revised licence arrangement

2.2	July 2015	Annual Review (formal consultation) Updates following informal consultation. Minor updates based on recommendations from 2015 Examination. Further review to align to Modification 0501V: 'Treatment of Existing Entry Capacity Rights at the Bacton ASEP to comply with EU Capacity Regulations'.
2.3	August 2015	No further changes following consultation. Submitted for Approval
3.0	October 2015	Authority Approval subject to a number of minor clarifications.
3.1	April 2017	Industry consultation: Update to align to UNC Modifications: 0598S: Amendments to Capacity Allocations Mechanisms to comply with EU Capacity Regulations and; 0597: Rules for the release of incremental capacity at Interconnection Points.
3.1	May 2017	Minor amendments following consultation
4.0	July 2017	Authority Approval.
4.1	January 2019	Preliminary Consultation: Revised economic test removing any dependency to the LRMC methodology. Removed reference to the obligation for a clearing allocation. Updates to reflect UNC modifications 616s (Capacity Conversion) and 628s (CLoCC).
4.2	March 2019	Formal Consultation: Clearing obligation now amended rather than deleted. Clarification that competing auctions can apply to IP Entry Points. Removed separate Chapter (14) on IP Pricing, and included relevant info in Chap 10. Project cost will only vary by inflation after reservation of capacity.

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ABOUT THIS STATEMENT

This Entry Capacity Release Methodology Statement (the "Statement")[1], describes the methodology that National Grid Gas plc ("National Grid") in its role as holder of the Gas Transporter Licence in respect of the NTS[2] ("the Licence") employs to determine whether to release ***Entry Capacity***, and in what quantities, to Shipper Users. It defines under what circumstances National Grid will accept applications for **NTS Entry Capacity** received from Shipper Users or the reservation of NTS Entry Capacity by developers ("Reservation Parties") through processes described in the Uniform Network Code ("UNC"), and thereby the level of financial commitment required from Shipper Users to justify the release/reservation of the quantity of ***Obligated Entry Capacity***.

This Statement contains terminology relating to entry capacity which is used in the Licence and in the UNC. Licence defined capacity terms are given in ***bold italics***; UNC defined capacity terms appear in **bold**. Other defined terms used but not defined in this Statement shall have the meaning given to them in the UNC and/or Licence as appropriate.

This Statement is one of a suite of statements that describe processes relating to the release of ***Entry Capacity*** and ***Exit Capacity*** by National Grid and the methodologies behind them. The other statements are available on the National Grid website at:

~~http://www2.nationalgrid.com/uk/industry-information/gas-capacity-methodologies/~~https://www.nationalgridgas.com/capacity/capacity-methodology-statements

~~This Statement will be applied from 31st July 2017.~~

This Statement has been published by National Grid in accordance with paragraphs 6(a) and 6(c) of Special Condition 9B of the Licence. National Grid believes the content is consistent with its duties under the Gas Act and the Licence.

If you require further details about any of the information contained within this Statement or have comments on how it might be improved please contact our ~~Gas Charging and Capacity Development~~Future Markets team at box.transmissioncapacityandcharging@nationalgrid.com or at:

~~Gas Charging and Capacity Development~~Future Markets (Gas)
~~Transmission Network Service~~
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Gallows Hill
Warwick
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[1] This Statement is often abbreviated to ECR.
[2] The gas National Transmission System

Contents

GENERAL INTRODUCTION

Background

1. National Grid is the owner and the operator of the gas National Transmission System (NTS) in Great Britain.

2. The NTS plays an important role in facilitating the competitive gas market and helping to provide the UK with a secure gas supply. It is a network of pipelines, presently operated at pressures of up to 94 barg, which transports gas safely and efficiently from coastal terminals and storage facilities to exit points from the system. Exit points are predominantly connections to Distribution Networks (DNs), but also include storage sites, and direct connections to power stations, large industrial consumers and other systems, such as interconnectors to other countries.

3. These operations are carried out to meet the needs of the companies that supply gas to domestic, commercial and industrial consumers and to power stations.

4. This Statement sets out the methodology that applies for the release of **NTS Entry Capacity**. **NTS Entry Capacity** consists of:

   - **Firm NTS Entry Capacity**[3] and
   - **Interruptible NTS Entry Capacity**[4]

   (both as defined in the UNC TPD Section B2.1.7 and UNC EID Section B1.4.1).

5. **Firm NTS Entry Capacity** is predominantly made available through the release of ***Obligated Entry Capacity***[5]. ***Obligated Entry Capacity*** includes (as defined in the Licence Special Condition 1A):
   - ***Non-incremental Obligated Entry Capacity*** (existing capacity); and
   - ***Incremental Obligated Entry Capacity***, which is additional capacity to be made available above the prevailing level of ***Obligated Entry Capacity***, primarily beyond investment lead times, in response to signals received from Shipper Users (or Reservation Parties) through processes described in the UNC.

6. **Firm NTS Entry Capacity** may also be made available by the release of ***Non-obligated Entry Capacity***. Release of ***Non-obligated Entry Capacity*** is at the sole discretion of National Grid.

7. Details of National Grid and its activities can be found on its internet site at ~~www2.nationalgrid.com~~ https://www.nationalgrid.com/.
   An electronic version of this Statement can be found at the following internet page ~~"http://www2.nationalgrid.com/UK/Industry-information/Gas-capacity-methodologies/Entry-Capacity-Release-Methodology-Statement/"~~.https://www.nationalgridgas.com/capacity/capacity-methodology-statements.

8. It is important that National Grid is made aware of potential developments where **NTS Entry Capacity** may be required for a sustained period (at existing or new entry points) at an early

[3] For the avoidance of doubt, Firm NTS Entry Capacity incorporates Firm NTS Interconnection Point Capacity.
[4] For the avoidance of doubt, Interruptible NTS Entry Capacity incorporates Interruptible NTS Interconnection Point Capacity.
[5] Please note that following the implementation of UNC Modification 0519 there ~~will~~ has been a small, notional increase in the level of Obligated Entry Capacity at Bacton Interconnection Points due to the application of EU reference conditions (representing a notional increase to the obligated level by 0.1%).

stage. This is needed so that discussions can be held with the customer in relation to any additional work that may be required, including facilitating the physical connection, whether this is at a new or existing entry point. This work is charged for separately as specified in "The Gas Transmission Connection Charging Methodology" in UNC TPD Section Y ~~Part A2~~ as required by the Licence Amended Standard Condition 4B. For the avoidance of doubt, this Statement relates to the release of ***Entry Capacity*** and the works and processes that may be necessary to facilitate such release. A separate process is followed for the provision of a new (or amendment to an existing) physical connection. Except where expressly stated otherwise, any reference in this Statement to an application, is to a request for **NTS Entry Capacity** and not a physical connection to the NTS. Further information about connection services is available on the National Grid website[6]. National Grid's Gas Contract Portfolio Team provide connection services and can be contacted via e-mail to: .box.ukt.customerlifecycle@nationalgrid.com

9. Typical lead times for the delivery of new pipeline infrastructure to create additional capacity in the NTS and the lead time for the construction of connected facilities are dependent on many variables including planning processes. It is important therefore that Shipper Users and Reservation Parties are able to commit early to the provision of additional capacity to avoid misalignment of projects. Delay in commencement of work to deliver additional capacity in the NTS could lead to that capacity not being available to the time frames originally required by the connecting party.

10. In order to facilitate the timely delivery of **Quarterly NTS Entry Capacity**[7] a Shipper User (or Reservation Party) can apply for a Planning and Advanced Reservation of Capacity Agreement, ("PARCA") between the Shipper User (or Reservation Party) and National Grid. The PARCA allows the reservation of capacity ahead of the Shipper User (or Nominated Users[8]) being allocated and registered as holding that capacity and hence before they are financially committed to the capacity itself[9].

    A generic PARCA can be found on National Grid's website at: ~~http://www2.nationalgrid.com/UK/Services/Gas-transmission-connections/Capacity-and-connections/Processes/Parca/~~https://www.nationalgridgas.com/connections/reserving-capacity-parca-and-cam

11. In order to facilitate the timely delivery of Interconnection Point Capacity a Shipper User (or Reservation Party) can apply for an Interconnection Point Planning and Advanced Reservation of Capacity Agreement, ("IP PARCA") between the User (or Reservation Party) and National Grid. The IP PARCA allows the reservation of capacity ahead of the User (or Nominated Users) being allocated and registered as holding that capacity and hence before they are User Committed to the capacity itself.

12. Subject to the terms of the PARCA or IP PARCA, National Grid will:
    (a) reserve capacity on behalf of the Shipper User (or Reservation Party) and subsequently allocate that **Reserved Entry Capacity** to, and on behalf, of the Shipper User (or Nominated User(s)). Subject to any necessary planning approval being granted, it is only through the PARCA or IP PARCA that timely delivery of ***Incremental Obligated Entry***

[6] ~~http://www2.nationalgrid.com/UK/Services/Gas-transmission-connections/~~https://www.nationalgridgas.com/connections/reserving-capacity-parca-and-cam
[7] Please note that this does not apply to Quarterly Interconnection Point Capacity.
[8] A Reservation Party will be required to nominate a Shipper User, or Users (a "Nominated User"), to be allocated the capacity that is made available through a PARCA or IP PARCA. The Nominated User may not be known at the time the PARCA or IP PARCA is entered into.
[9] PARCA or IP PARCA Applicants will be subject to specific security requirements under the terms of the PARCA or IP PARCA to demonstrate a commitment to the reserved capacity.

Capacity is possible, it is the delivery of any Works that drives the lead times to deliver additional capacity.

(b) undertake such Works as is necessary to provide ***Incremental Obligated Entry Capacity*** and will reserve such existing ***Obligated Entry Capacity*** as is necessary to satisfy the capacity request.

13. Capacity will be allocated to the Shipper User or Nominated User, in the quantity requested and, if available, this shall include a level of capacity tolerance, by the date determined subject to the terms of the PARCA or IP PARCA[10].

14. When applying for a PARCA or IP PARCA the counterparty[11] will be required to pay an application fee (the "Phase 1 PARCA Fee") which shall cover the initial Works to be undertaken (i.e. the "Phase 1 PARCA Works"). For the IP PARCA a fee is payable (a Demand Indication Application Fee (DIA Fee)) and will be payable by each party submitting a demand indication. The DIA Fee will be returned if the application passes the Economic Test. Should they wish to progress the PARCA beyond Phase 1, or in the case of an IP PARCA to progress to the binding phase, the counterparty will be required to provide security for subsequent Works/reservation of capacity. Pursuant to the PARCA or IP PARCA in the event that the PARCA or IP PARCA is terminated prior to allocation of the reserved **Quarterly NTS Entry Capacity** or **Interconnection Point Capacity** at the relevant location, in the quantity, and by the date, determined through, the PARCA or IP PARCA, the PARCA or IP PARCA Applicant may be liable to pay a PARCA or IP PARCA Termination Amount.

National Grid's Licence Obligations

15. Subject to paragraphs 86 and 105~~103~~, new and existing Shipper Users of the NTS are able to request to purchase entry capacity products for any NTS Aggregate System Entry Point (ASEP)[12]. Such capacity requests will be considered against the provisions of National Grid's statutory licence obligations and in accordance with its published methodologies.

16. Overriding obligations applicable to this Statement are set out in the Gas Act and the Licence and are that National Grid's activities must be:
- Conducted on a non-discriminatory basis;
- Conducted in an efficient, economic and co-ordinated manner; and
- Be consistent with the safe and efficient operation of National Grid's pipe-line system and security of supply obligations.

17. Specific obligations in respect of the release of the prevailing level of ***Obligated Entry Capacity*** and applicable to this Statement are set out in Special Condition 9B of the Licence.

18. Specific obligations in respect of the release of ***Incremental Obligated Entry Capacity*** and applicable to this Statement are set out in Special Condition 9B and 9C of the Licence.

19. Under Special Condition 9B of the Licence, National Grid must prepare and submit to the Authority for approval the "capacity release methodology statements". This Statement sets out the methodology by which National Grid will:

[10] In the absence of a PARCA, capacity in excess of the level of available unsold ***Obligated Entry Capacity*** at the relevant location by any specific date may be made available through other auction processes and National Grid will assess its ability to meet such requests in accordance with the further provisions of UNC and this Statement.
[11] i.e. the Shipper User or Reservation Party.
[12] Referred to in the Licence as NTS Entry Points

- determine the quantity of ***Obligated Entry Capacity*** that it will make available to Shipper Users; and
- determine whether to make ***Incremental Entry Capacity*** available for sale to Shipper Users and, if so, what quantity of ***Incremental Entry Capacity*** to make available.

20. Without prejudice to Part A of this Statement, in determining the quantity of ***Obligated Entry Capacity*** to be made available to Shipper Users, National Grid will consider the quantity of
    - ***Non-incremental Obligated Entry Capacity***; and
    - ***Incremental Obligated Entry Capacity*** released in previous auctions;

    that has not been allocated.

21. Without prejudice to Part B of this Statement, ***Incremental Entry Capacity*** released in any auction, is that quantity in excess of the prevailing level of ***Obligated Entry Capacity. Incremental Entry Capacity*** may consist of:
    - New ***Incremental Obligated Entry Capacity*** triggered by bids in the current auction; and/or
    - ***Non-obligated Entry Capacity.***

    For the avoidance of doubt, the release of ***Incremental Obligated Entry Capacity*** at Interconnection Points cannot be triggered via auctions and will only be released in accordance with Part C of this statement.

22. Under Special Condition 5F of the Licence, National Grid must publish information that provides details of the proposed reservation of Incremental Obligated Entry Capacity. This will state the quantity of Incremental Obligated Entry Capacity proposed to be treated as:
    - Funded Incremental Obligated Entry Capacity; or
    - Non-incremental Obligated Entry Capacity provided by Entry Capacity Substitution in accordance with Special Condition 9A.

23. Under Special Condition 5F of the Licence, National Grid must provide the Authority with an Entry Capacity notice providing details of all proposed ***Incremental Obligated Entry Capacity*** release. The notice will state the volume of ***Incremental Obligated Entry Capacity*** proposed to be treated as:
    - ***Funded Incremental Obligated Entry Capacity***; or
    - ***Non-incremental Obligated Entry Capacity*** provided by Entry Capacity Substitution in accordance with Special Condition 9A.

    Unless directed to the contrary within 28 days of the date of submission of this notice, National Grid shall implement the proposals as set out within the Entry Capacity notice. In the event that the Authority vetoes such proposals for the release of ***Incremental Obligated Entry Capacity*** National Grid may not, pursuant to the PARCA, allocate **Quarterly NTS Entry Capacity** in excess of the quantity of **Unsold NTS Entry Capacity** to the Shipper User.

24. Pursuant to a PARCA[13], National Grid will reserve capacity from an ASEP (a donor ASEP) for subsequent substitution to another ASEP (a recipient ASEP). Such reservation will be undertaken prior to the allocation of that **Reserved Entry Capacity** at the recipient ASEP. Any decision by National Grid to reserve capacity pending substitution (substitution shall be confirmed ahead of allocation of capacity at the recipient ASEP) shall be published pursuant to paragraph 22. In the event that:
    - the **Reserved Entry Capacity** is subsequently required to be substituted to the recipient ASEP and allocated to a Shipper User, National Grid will notify the Authority of the proposed substitution in the Entry Capacity notice referred to in paragraph 23.

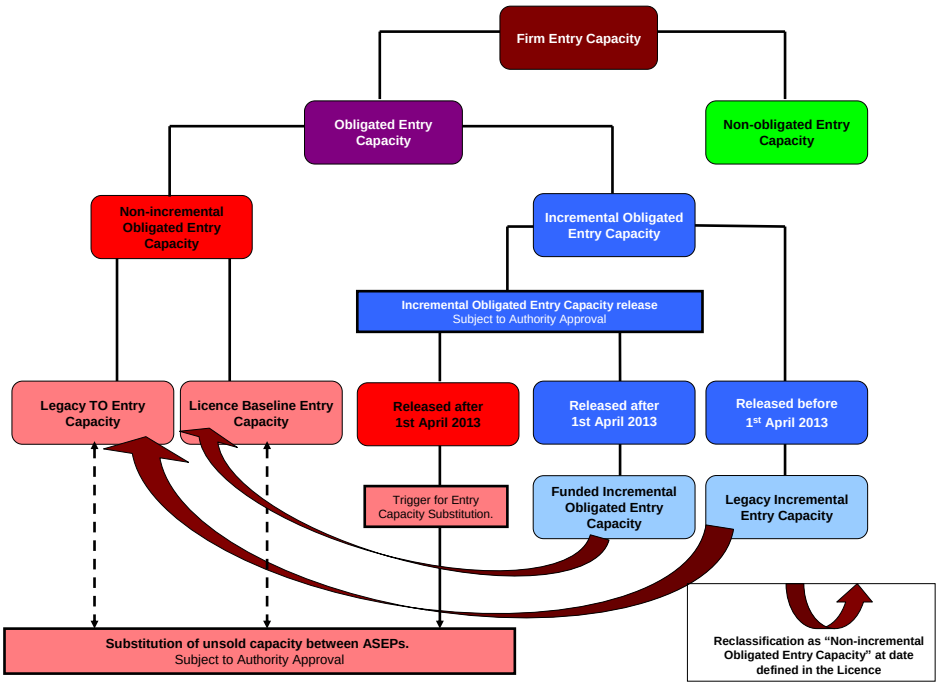
[13] This includes an IP PARCA in accordance with the process set out in Part C Chapter 11

- the Authority vetoes such substitution proposals (and any feasible alternatives) for capacity substitution pursuant to paragraph 23, National Grid will not substitute capacity from the donor ASEP to the recipient ASEP. Any resulting allocation of capacity at the ASEP specified in the PARCA will be pursuant to the terms of the PARCA. This may mean that capacity is allocated in a smaller quantity than requested; is allocated with a longer lead time; or may not be allocated at all. Any resulting allocations will be determined following discussion of the options between National Grid and the counterparty pursuant to the terms of the PARCA.

Capacity Terminology

25. This Statement contains terminology relating to entry capacity which is used in the Licence for the purposes of distinguishing between National Grid's capacity obligations and revenue treatments. It should be noted that although this terminology exists, it does not change the capacity products that Shipper Users procure through established UNC processes e.g. **Firm NTS Entry Capacity** and **Interruptible NTS Entry Capacity**. Throughout this Statement Licence defined capacity terms are given in ***bold italics***; UNC defined terms appear in **bold**.

26. The terminology and relationships relating to ***Firm Entry Capacity***[14] are provided below to assist the reader in interpreting this Statement.



[14] This Statement also covers the release of ***Interruptible Entry Capacity***.

27. The actual definitions of these terms are contained within the Licence (Special Condition 1A). Where any conflict arises between the Licence and this Statement the Licence shall prevail.

National Grid's Internal Planning Process

28. National Grid believes it is appropriate for it to continue to develop the NTS in a way that provides its customers and Great Britain generally, with a gas transmission system that is robust against supply shocks and which keeps pace with changes in the gas market, such as increasing dependency on imported supplies.

29. National Grid is required by Special Condition 7A of the Licence, "Long Term Development Statement", to prepare an annual statement, with respect to each of the succeeding 10 years that will forecast;
    - The use likely to be made of the pipe-line system; and
    - The likely developments of that system.

30. National Grid believes it is important to seek wide views on the process for determining how it invests in its network as well as on the underlying assumptions that underpin such investment. An enhanced consultation process is operated under the banner of 'Future Energy Scenarios' with a view to obtaining industry views on how the industry would like to see the NTS developed.

31. The trigger for any allowed revenue associated to ***Incremental Obligated Entry Capacity*** is via an allocation of **Quarterly NTS Entry Capacity** in accordance with the terms of a PARCA.

32. This Statement describes the process by which such releases of ***Incremental Obligated Entry Capacity*** would normally be triggered. It should be noted that the release of ***Funded Incremental Obligated Entry Capacity*** and hence the potential need to undertake investment in the NTS, can be fully or partially avoided, e.g. through entry capacity substitution (see paragraph 34). National Grid's planning relates to the activities of National Grid in the development of the NTS. However, statutory planning application processes and consents apply to circumstances where investment in new pipeline infrastructure is needed. References to "planning" should be read accordingly.

33. In addition to allocating ***Obligated Entry Capacity*** pursuant to an auction signal, National Grid may, at its sole discretion, release for sale additional ***Entry Capacity*** for which it has no obligation to do so. For the purpose of the Licence any capacity released in accordance with this paragraph will be classified as ***Non-obligated Entry Capacity***.

34. National Grid also has a Licence obligation (Special Condition 9A) to consider whether unsold ***Non-incremental Obligated Entry Capacity*** can be substituted to ASEPs where there would otherwise be a requirement to release ***Funded Incremental Obligated Entry Capacity***; i.e. demand exceeds the prevailing level of ***Obligated Entry Capacity*** and paragraph 33 does not apply, thereby, potentially, reducing the requirement for investment in the NTS. The process by which substitution may be considered and the methodology that would be applied is provided in the "Entry Capacity Substitution Methodology Statement" (the "ECS") produced pursuant to Licence Special condition 9A.

35. For the avoidance of doubt, the release of all ***Entry Capacity*** in excess of the prevailing level of ***Obligated Entry Capacity*** at an ASEP will be in accordance with Part B of this Statement.

36. National Grid will consider opportunities for entry capacity substitution in accordance with the substitution rules stated in the ECS. As a result, demand for capacity at an ASEP in excess

of the prevailing level of ***Obligated Entry Capacity*** may be met through ***Non-incremental Obligated Entry Capacity***, rather than ***Funded Incremental Obligated Entry Capacity***, facilitated by a reduction in the ***Licence Baseline Entry Capacity*** (and/or ***Legacy TO Entry Capacity***) at another ASEP.

- To minimise the need for investment, before releasing ***Funded Incremental Obligated Entry Capacity*** at an ASEP National Grid will consider opportunities to substitute unsold ***Non-Incremental Obligated Entry Capacity*** from another ASEP. In addition, substitution will only be considered if the existing capability of the NTS (when taking all existing commitments into account) is insufficient to satisfy requests for additional capacity at an ASEP,
- National Grid will substitute ***Entry Capacity*** (as detailed above) between ASEPs with a release date consistent with the ECS,
- Where Substitutable Capacity (as defined in the ECS) has been identified as suitable for substitution to another recipient ASEP to satisfy the requirement for additional capacity at that recipient ASEP, the Substitutable Capacity will not be available for release at the original donor ASEP[15] until, and unless, it has been identified as not being required for substitution (see the ECS). The identification of Substitutable Capacity will follow an application for **Quarterly NTS Entry Capacity through either**:
  - (a) **the March QSEC**: or
  - (b) a PARCA being entered into with National Grid and completion of the Phase 1 PARCA Works,

  where, in the absence of substitution, this would require the release of ***Incremental Obligated Entry Capacity***. Any proposals for capacity substitution, (whether pursuant to a Shipper User bid and subsequent allocation or pursuant to a PARCA and subsequent reservation) and hence any limitation on capacity being made available at the donor ASEP, will be subject to non-veto by the Authority (see paragraphs 22 and 23).

37. Where, pursuant to a PARCA, National Grid identifies that the allocation of **Quarterly NTS Entry Capacity** can be satisfied, in part or whole, from unsold ***Non-incremental Obligated Entry Capacity*** at the same ASEP, then that ***Non-incremental Obligated Entry Capacity*** will be reserved and will not be available for release (from the registration date determined through the PARCA) unless it is subsequently determined as not being required and hence is no longer reserved.

[15] Prior to Substitutable Capacity being substituted to a recipient ASEP it will be available at the donor ASEP, i.e. it will be available at the donor ASEP in the short/medium term.

CHAPTER 1: PRINCIPLES

Purpose of the Statement

38. This Statement has been produced to meet the requirements of Special Condition 9B of the Licence. This condition requires the preparation of capacity release methodology statements setting out how (in respect of ***Entry Capacity***) National Grid will determine:
    - The release of ***Obligated Entry Capacity*** (see paragraph 20) to relevant Shipper Users; and
    - The quantity of ***Incremental Entry Capacity*** (see paragraph 21) to be made available for sale to relevant Shipper Users.

    National Grid believes the content is consistent with its duties under the Gas Act and the Licence.

Scope

39. Overriding obligations on National Grid set out in the Gas Act and the Licence are that its activities must be:
    - Conducted on a non-discriminatory basis;
    - Conducted in an efficient, economic and co-ordinated manner; and
    - Be consistent with the safe and efficient operation of National Grid's pipe-line system and security of supply obligations.

40. This Statement applies to the release of all forms of ***Entry Capacity***, as defined in the Licence, by National Grid and shall include:
    - ***Licence Baseline Entry Capacity***;
    - ***Legacy TO Entry Capacity***;
    - ***Non-incremental Obligated Entry Capacity***;
    - ***Incremental Obligated Entry Capacity*** (including ***Funded Incremental Obligated Entry Capacity*** and ***Legacy Incremental Entry Capacity***);
    - ***Non-obligated Entry Capacity***; and
    - ***Interruptible Entry Capacity***

    and applies to the allocation of all classes of **NTS Entry Capacity** as defined in the UNC (TPD Section B and EID Section B).

Structure of the Statement

41. The methodology described in this Statement is set out in three main sections.

42. Part A[16] sets out how, and in what quantities, National Grid will offer for sale ***Obligated Entry Capacity*** to Shipper Users.
    - Chapter 2 sets the context in which bids for ***Obligated Entry Capacity*** will be considered; and
    - Chapter 3 covers the various processes by which ***Obligated Entry Capacity*** will be made available to Shipper Users.

[16] This section does not apply at Interconnection Points.

43. Part B[17] sets out how, National Grid will determine whether to make ***Incremental Entry Capacity*** available for sale to Shipper Users and, if so, what quantity of ***Incremental Entry Capacity*** to make available.
    - Chapter 4 sets the context in which bids for ***Incremental Obligated Entry Capacity*** release will be considered;
    - Chapter 5 explains the role of PARCA's to facilitate the timely release, and revenue drivers[18] for the funding, of ***Incremental Obligated Entry Capacity***;
    - Chapter 6 details the decision making process for the release of ***Incremental Obligated Entry Capacity***;
    - Chapter 7 looks at the methodology for setting the minimum bid price required for each incremental step quantity; and
    - Chapter 8 covers the release of ***Non-Obligated Entry Capacity***.

44. Part C[19] sets out how, and in what quantities, National Grid will offer for sale **Interconnection Point Capacity** to Shipper Users at Interconnection Points.

IP's Only

    - Chapter 9 sets the context in which bids for **Interconnection Point Capacity**[20] will be considered;
    - Chapter 10 covers the various processes by which **Interconnection Point Capacity** will be made available to Shipper Users;
    - Chapter 11 covers the processes for the release of Incremental Interconnection Point Capacity
    - Chapter 12 covers Congestion Management Procedures which impact the quantity of **Interconnection Point Capacity** made available;
    - Chapter 13 covers the release of ***Non-Obligated Entry Capacity***; and
    - Chapter 14 looks at the methodology for setting the prices required for each step quantity.

[17] This section does not apply at Interconnection Points.
[18] The adjustment to Totex allowances that results from triggering the incremental capacity uncertainty mechanism is more commonly known as the "revenue driver", as further defined in the Generic Revenue Driver Methodology Statement.
[19] This section applies to **Interconnection Point Capacity** only.
[20] References to **Interconnection Point Capacity** in this statement comprises **NTS Entry Capacity** at Interconnection Point ASEPs which can be Firm or Interruptible and Bundled or Unbundled.

PART A: OBLIGATED ENTRY CAPACITY RELEASE

CHAPTER 2: CONTEXT

45. **NTS Entry Capacity** is made available to Shipper Users via the PARCA Application process or through a series of capacity auctions. This Part A identifies the processes by which the prevailing level of ***Obligated Entry Capacity***, will be made available to Shipper Users via capacity auctions. These processes are detailed in UNC TPD Section B. Reference should be made to UNC for further information. Note: Obligated Entry Capacity has essentially the same meaning in UNC and in the Licence.

46. The prevailing level of ***Obligated Entry Capacity*** in respect of any auction excludes:
    - ***Non-obligated Entry Capacity*** (see Chapter 8 / paragraph 167~~178~~) released in previous auctions; and
    - any ***Incremental Obligated Entry Capacity*** that might be released pursuant to Part B of this Statement in that auction.

47. Dependent upon the specific auction, ***Entry Capacity*** may be made available as **Firm NTS Entry Capacity** or **Interruptible NTS Entry Capacity**.

    The ***Obligated Entry Capacity*** level will be published for each ASEP at least once per year in the "entry capacity release obligation summary report". This report is published pursuant to Part D of Special Condition 9B of the Licence and is incorporated within the Long-Term Summary report (see also paragraphs 15~~7~~ to 65) which can be found on National Grid's website by following the link to 'past auction data' at at: https://www.nationalgridgas.com/capacity/entry-capacity~~http://www2.nationalgrid.com/uk/industry-information/gas-transmission-system-operations/capacity/entry-capacity-auction/~~.

48. The quantity of ***Obligated Entry Capacity*** to be made available at each ASEP in each capacity release auction will be specified in the appropriate auction invitation notice from National Grid (excluding daily auctions for which an invitation is not provided). Chapter 3 of this Statement details how these quantities are determined.

CHAPTER 3: AUCTION PROCESSES FOR THE RELEASE OF OBLIGATED ENTRY CAPACITY.

49. ***Obligated Entry Capacity*** is a finite quantity and therefore National Grid makes it available to all Shipper Users and allocates it in descending price order[21], i.e. to those who value it most. Hence National Grid runs a variety of annual, monthly and daily auctions which are detailed in UNC TPD Section B. National Grid will release capacity consistent with the processes and obligations defined in UNC.

50. These capacity auctions make available daily capacity (i.e. a daily right to deliver gas into the NTS at an ASEP on a particular Gas Flow Day) in quarterly, monthly and single daily strips. In respect of daily auctions only, capacity may be available as either **Firm NTS Entry Capacity** and/or as **Interruptible NTS Entry Capacity**.

51. Each auction has a reserve price. The Reserve Price calculation is intended to:
    - ensure that the total income that National Grid expects to receive through the auctions is reasonably consistent with the income it is allowed to receive in accordance with the Licence. Any variation from the allowed revenue is corrected through commodity charges (based on actual flows).
    - ensure that prices are cost reflective. ASEPs that are further away from demand centres tend to have higher reserve prices. Similarly, as gas input at larger ASEPs penetrates further into the system the prices for these ASEPs will generally be higher.
    - Subject to paragraph 52, ensure that at ASEPs where there is limited competition for capacity that a cost reflective price is paid for that capacity.

    For more details on the reserve prices for each auction and their calculation, please see National Grid's Statement of Gas Transmission Transportation Charges and UNC TPD Section Y.

52. At least one auction will result in a clearing allocation[22] in which National Grid will use reasonable endeavours to make available all the available ***Obligated Entry Capacity*** at each ASEP, subject to paragraph 73. This auction will have a zero reserve price, unless otherwise stated within the prevailing Gas Transmission Transportation Charging Statement. The clearing auction will be a Daily NTS Entry Capacity (DSEC) auction held on same Day ("D") for which capacity is made available.

53. There are six main auction mechanisms through which Shipper Users can obtain **NTS Entry Capacity[23]**. These are:

    - The NTS Entry Capacity auction for **Quarterly NTS Entry Capacity** (the QSEC auction) is normally held on an **Annual** basis. In the annual (currently held in March) long term capacity auctions National Grid sells **Firm NTS Entry Capacity** for Gas Years Y+2 to Y+16 (i.e. an auction held in March ~~2018~~ 2019 will be for capacity release over the period October ~~2019~~ 2020 to September ~~2034~~2035). Capacity made available in these auctions will be sold as **Quarterly NTS Entry Capacity,** i.e. it will be registered to the Shipper User for each Day in a particular calendar quarter.

[21] Apart from the QSEC auction which utilises a clearing price arrangement.
[22] In respect of an ASEP and period, an allocation of ***Entry Capacity*** which either:
(a) results in all the Entry Capacity offered for sale being sold; or
(b) has a reserve price of zero, unless otherwise stated in the Gas Transmission Transportation Charging Statement.
[23] Please note ***Obligated Entry Capacity*** is released through all auction mechanisms described apart from the Daily Interruptible NTS Entry Capacity Auction which releases ***Interruptible Entry Capacity*** only.

This is the only auction in which both the prevailing ***Obligated Entry Capacity*** and ***Incremental Obligated Entry Capacity*** are released, subject to paragraph 115~~113~~. (Note ***Incremental Entry Capacity***, in the form of ***Non-obligated Entry Capacity***, may be released in any auction[24]).

- Additional NTS Entry Capacity auctions for **Quarterly NTS Entry Capacity** (Ad-hoc QSEC auctions) can be held following the acceptance of a competent PARCA Application in respect of an ASEP. In these auctions National Grid sells **Firm NTS Entry Capacity** for Gas Years Y+2 to Y+16 (i.e. an Ad-hoc QSEC auction held in August ~~2018~~ 2019 will be for capacity release over the period October ~~2019~~ 2020to September ~~2034~~2035) at all ASEPs where there is **Unsold NTS Entry Capacity**. Capacity made available in these auctions will be sold as **Quarterly NTS Entry Capacity,** i.e. it will be registered to the Shipper User for each Day in a particular calendar quarter.

  In the Ad-hoc QSEC auction only **Unsold NTS Entry Capacity** will be available to Shipper Users. ***Incremental Obligated Entry Capacity*** will not be released.

  These long term capacity auctions will only be run following the acceptance of a competent PARCA Application in respect of an ASEP and the initiation of the Phase 1 PARCA Works.

  Prior to an Ad-hoc QSEC auction, National Grid will notify Shipper Users of the acceptance of a competent PARCA Application(s), an indicative range for the quantity of capacity proposed to be reserved, the geographic area (or the ASEP if known) and the indicative effective date.

  The Ad-hoc QSEC auction will be held in accordance with UNC Section B.
  - To ensure that an Ad-hoc QSEC auction does not overlap with the March QSEC auction process, the Ad-hoc QSEC auction will not be run on the dates 1st February to 31st May inclusive.
  - An Ad-hoc QSEC auction invitation will not be issued in respect of a PARCA where initiation of the Phase 1 PARCA Works for that PARCA occurs after 31st January and before the final bid window of the March QSEC Auction in the same Gas Year closes.
  - A second, or subsequent, competent PARCA Application in respect of any ASEP will not trigger an Ad-hoc QSEC auction if the notice of that PARCA Application has been published prior to the final bid window of the March QSEC auction or the previous Ad-hoc QSEC auction as applicable.

- The Annual NTS Entry Capacity auction for **Monthly NTS Entry Capacity** (the AMSEC auction). In these annual (currently held in February) capacity auctions National Grid sells **Firm NTS Entry Capacity** for months M+2 to M+19 (i.e. an auction held in February ~~2018~~ 2019 will be for capacity release over the period April ~~2018~~ 2019 to September ~~2019~~2020). Capacity made available in these auctions will be sold as **Monthly NTS Entry Capacity** (i.e. it will be registered to the Shipper User for each Day in a particular calendar month).

- The Rolling Monthly NTS Entry Capacity auction (the RMTNTSEC auction). In this capacity auction held every month National Grid sells **Firm NTS Entry Capacity** for every day in the following month. Capacity made available in these auctions will be

[24] Except the Daily Interruptible NTS Entry Capacity (DISEC)

sold as **Monthly NTS Entry Capacity** (i.e. it will be registered to the Shipper User for each Day in the relevant calendar month).

In order to make available additional quantities of capacity at ASEPs that sell out, it is possible in this auction to transfer unsold capacity and/or trade[25] sold capacity from other ASEPs. The Transfer and Trade of capacity shall be in accordance with further provisions of UNC TPD Section B and the Entry Capacity Transfer and Trade Methodology Statement which can be found at: ~~http://www2.nationalgrid.com/UK/Industry-information/Gas-capacity-methodologies/Entry-Capacity-Transfer-and-Trade-Methodology-Statement/~~https://www.nationalgridgas.com/capacity/capacity-methodology-statements

- Daily NTS Entry Capacity (DSEC) auctions. In these short term capacity auctions Shipper Users can bid for **Firm NTS Entry Capacity** from Gas Flow Days D-7 to within Gas Flow Day D (e.g. capacity can be bid for on any day over the period 1st to 8th of the month for use on the 8th). Subject to availability, capacity will be allocated on D-1 and within Day D. It will be sold as **Daily NTS Entry Capacity** (i.e. it will be registered to the Shipper User for the relevant Day only).This auction allows capacity to be bought in advance and/or on the Day of use.

- Daily Interruptible NTS Entry Capacity (DISEC) auctions. In these short term capacity auctions Shipper Users can bid for **Interruptible NTS Entry Capacity** from Gas Flow Days D-7 to D-1 (e.g. capacity bids can be placed on any day over the period 1st to 7th of the month for use on the 8th). Capacity will be allocated on D-1. It will be sold as **Daily Interruptible NTS Entry Capacity** (i.e. it will be registered to the Shipper User for the relevant Day only and may be subject to curtailment pursuant to UNC Section B2.9). **Daily Interruptible NTS Entry Capacity** cannot be bought "on-the-Day".

~~54.~~ A PARCA (see chapter 5 for more details) can be used by Shipper Users and Reservation Parties to reserve existing ***Obligated Entry Capacity*** ~~where such applications are not expected to require the release of~~as well as ***Incremental Obligated Entry Capacity***~~.~~. Any capacity applied for through a PARCA will only be reserved if a capacity amount is requested for at least x quarters in a 32 quarter period, where quarter 1 of the 32 quarter period is the first quarter capacity is requested for, and x is the **PARCA minimum duration quantity**. ~~i.e. w~~Where the capacity application can be satisfied:

(a) From any **Available NTS Entry Capacity** at the point in question then the **PARCA minimum duration quantity** shall be as per UNC Section B 1.17.7(c)(ii)[26].

(b) By entry capacity substitution then the **PARCA minimum duration quantity** shall be as per the rule above for **Available NTS Entry Capacity**.

(c) By the release of **Incremental Obligated Entry Capacity** then the **PARCA minimum duration quantity** shall be as per the rule above for substitution.

~~(a) From any **Available NTS Entry Capacity**: and/or~~

~~(b) By entry capacity substitution; and/or~~

~~(c) From the use of existing infrastructure.~~

~~Any such application pursuant to this paragraph 54, i.e. where ***Incremental Obligated Entry Capacity*** is not required to be released, will only be reserved if capacity is requested for at least 16 quarters in a 32 quarter period, where quarter 1 of the 32 quarter period is the first quarter capacity is requested for.~~

[25] Note: Trading of **NTS Entry Capacity** at the same ASEP is possible between Shipper Users at any time.

[26] At the time of the last update to this statement, then the minimum duration rule in the UNC is for at least 16 quarters.

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54.

55. In addition, National Grid may, at its sole discretion, sell **Firm NTS Entry Capacity** at additional times. This will be via separate processes, detailed in UNC TPD Section B2.1.14, and will normally be run in response to specific Shipper User requests. Such capacity is referred to as **Discretionary NTS Entry Capacity** and shall be available for a maximum period of one Capacity Year. This auction will make available ***Non-obligated Entry Capacity*** and may include some unsold ***Obligated Entry Capacity***.

56. In addition, Shipper Users may also obtain **NTS Entry Capacity** by secondary trades, otherwise known as System Capacity Transfers (details can be found in UNC TPD Section B5).

Long Term Summary Report

The maximum quantity of capacity to be made available in any auction process (excluding any ***Incremental Entry Capacity*** made available pursuant to Part B of this Statement) will be the ***Obligated Entry Capacity***. Pursuant to Part D of Special Condition 9B of the Licence, ~~T~~the ***Obligated Entry Capacity*** is stated for each ASEP, for each month (or quarter) (on a forward looking basis) in ~~the~~ an obligation summary report. This report will also detail the **Reserved Entry Capacity** at each ASEP. The obligation summary report is provided within the Long-Term Summary report.

57.

~~57.~~58. The Long-Term Summary report can be found by following the link to 'past auction data' on National Grid's website at: ~~http://www2.nationalgrid.com/uk/industry-information/gas-transmission-system-operations/capacity/entry-capacity-auction/~~ https://www.nationalgridgas.com/capacity/entry-capacity

The following search details should be selected and the relevant date range entered:

- Auction Type: Long Term Summary
- Report Type: Summary Report.

~~58.~~59. The Long-Term Summary report is updated monthly. For each ASEP there are two sets of data:

- the level of ***Obligated Entry Capacity*** (the obligation summary report). This quantity is broken down into the different Licence classifications of capacity). These quantities vary according to the release of incremental capacity (in the current and previous regulatory periods) so are not subject to frequent change; and
- the quantity of **Firm NTS Entry Capacity** sold and the available unsold quantity (taking into account **Reserved Entry Capacity**).

Examples are shown below.

~~59.~~60. Table 1: shows the ***Obligated Entry Capacity*** for example ASEPs.

~~60.~~61. This table shows the 'Total Obligated' (the total amount of ***Obligated Entry Capacity***), which is the maximum quantity that National Grid has an obligation to release at the ASEP for the relevant month. For dates beyond the release period of the AMSEC auction the monthly quantities for all three months of each quarter will be identical as capacity can only be obtained in quarterly quantities beyond this timeframe. **Reserved Entry Capacity** is not taken into account in this report.

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~~61.~~62. For Licence purposes it is necessary to identify the ***Obligated Entry Capacity*** in its constituent parts. Consistent with the diagram in paragraph 26:

- Non-Incremental is the ***Non-incremental Obligated Entry Capacity***, being the ***Licence Baseline Entry Capacity*** quantity (as ~~is stated~~set out in ~~Table 4 of~~ Special Condition 5F of the Licence) plus any ***Legacy TO Entry Capacity*** (quantities and effective dates are provided in Table 6 of the same Licence condition) as may be adjusted by any entry capacity substitution (quantities and effective dates of approved substitutions are provided in Table 5 of the same Licence condition).
- Legacy Incremental is "***Legacy Incremental Entry Capacity***" and refers to incremental capacity released in previous regulatory periods (i.e. before 1st April 2013) for which National Grid receives revenue as System Operator. This capacity will be reclassified as ***Legacy TO Entry Capacity*** (i.e. National Grid receives revenue as Transmission Owner) according to the dates and quantities stated in Table 6 of Special Condition 5F of the Licence.
- Funded Incremental is ***Funded Incremental Obligated Entry Capacity*** released pursuant to Part B of this Statement during the RIIO-T1 regulatory period (i.e. in QSEC auctions held in and after April 2013)

Table 1: Obligation Summary Report (*for illustrative purposes only*)

Month	ASEP A				ASEP B			
	A				B			
	Non-Incremental	Legacy Incremental	Funded Incremental	Total Obligated	Non-Incremental	Legacy Incremental	Funded Incremental	Total Obligated
	kWh/d	kWh/d	kWh/d	kWh/d	kWh/d	kWh/d	kWh/d	kWh/d
May-16	50,000,000	60,000,000	0	110,000,000	0	850,000,000	0	850,000,000
Jun-16	50,000,000	60,000,000	0	110,000,000	0	850,000,000	0	850,000,000
Jul-16	50,000,000	60,000,000	0	110,000,000	0	850,000,000	0	850,000,000
Aug-16	50,000,000	60,000,000	0	110,000,000	0	850,000,000	0	850,000,000
Sep-16	50,000,000	60,000,000	0	110,000,000	0	850,000,000	0	850,000,000
Oct-16	50,000,000	60,000,000	0	110,000,000	0	850,000,000	0	850,000,000
Nov-16	50,000,000	60,000,000	0	110,000,000	0	850,000,000	0	850,000,000
Dec-16	50,000,000	60,000,000	0	110,000,000	0	850,000,000	0	850,000,000
Jan-17	50,000,000	60,000,000	0	110,000,000	0	850,000,000	0	850,000,000
Feb-17	50,000,000	60,000,000	0	110,000,000	0	850,000,000	0	850,000,000
Mar-17	50,000,000	60,000,000	0	110,000,000	0	850,000,000	0	850,000,000
Apr-17	50,000,000	60,000,000	0	110,000,000	0	850,000,000	0	850,000,000
May-17	50,000,000	60,000,000	0	110,000,000	0	850,000,000	0	850,000,000
Jun-17	50,000,000	60,000,000	0	110,000,000	0	850,000,000	0	850,000,000
Jul-17	50,000,000	60,000,000	0	110,000,000	0	850,000,000	0	850,000,000
Aug-17	50,000,000	60,000,000	0	110,000,000	0	850,000,000	0	850,000,000
Sep-17	50,000,000	60,000,000	0	110,000,000	0	850,000,000	0	850,000,000
Oct-17	50,000,000	60,000,000	0	110,000,000	0	850,000,000	0	850,000,000
Nov-17	50,000,000	60,000,000	0	110,000,000	0	850,000,000	0	850,000,000
Dec-17	50,000,000	60,000,000	0	110,000,000	0	850,000,000	0	850,000,000
Jan-18	50,000,000	60,000,000	0	110,000,000	0	850,000,000	0	850,000,000
Feb-18	50,000,000	60,000,000	0	110,000,000	0	850,000,000	0	850,000,000
Mar-18	50,000,000	60,000,000	0	110,000,000	0	850,000,000	0	850,000,000
Apr-18	50,000,000	60,000,000	0	110,000,000	0	850,000,000	0	850,000,000
May-18	50,000,000	60,000,000	0	110,000,000	0	850,000,000	0	850,000,000
Jun-18	50,000,000	60,000,000	0	110,000,000	0	850,000,000	0	850,000,000
Jul-18	50,000,000	60,000,000	0	110,000,000	0	850,000,000	0	850,000,000
Aug-18	50,000,000	60,000,000	0	110,000,000	0	850,000,000	0	850,000,000
Sep-18	50,000,000	60,000,000	0	110,000,000	0	850,000,000	0	850,000,000
Oct-18	70,000,000	40,000,000	0	110,000,000	0	850,000,000	0	850,000,000
Nov-18	70,000,000	40,000,000	0	110,000,000	0	850,000,000	0	850,000,000
Dec-18	70,000,000	40,000,000	0	110,000,000	0	850,000,000	0	850,000,000
Jan-19	70,000,000	40,000,000	0	110,000,000	0	850,000,000	0	850,000,000
Feb-19	70,000,000	40,000,000	0	110,000,000	0	850,000,000	0	850,000,000
Mar-19	70,000,000	40,000,000	0	110,000,000	0	850,000,000	0	850,000,000
Apr-19	70,000,000	40,000,000	0	110,000,000	0	850,000,000	0	850,000,000
May-19	70,000,000	40,000,000	0	110,000,000	0	850,000,000	0	850,000,000
Jun-19	70,000,000	40,000,000	0	110,000,000	0	850,000,000	0	850,000,000
Jul-19	70,000,000	40,000,000	0	110,000,000	0	850,000,000	0	850,000,000
Aug-19	70,000,000	40,000,000	0	110,000,000	0	850,000,000	0	850,000,000
Sep-19	70,000,000	40,000,000	0	110,000,000	0	850,000,000	0	850,000,000
Oct-19	70,000,000	40,000,000	0	110,000,000	0	850,000,000	0	850,000,000
Nov-19	70,000,000	40,000,000	0	110,000,000	0	850,000,000	0	850,000,000
Dec-19	70,000,000	40,000,000	0	110,000,000	0	850,000,000	0	850,000,000
Jan-20	70,000,000	40,000,000	0	110,000,000	0	850,000,000	0	850,000,000
Feb-20	70,000,000	40,000,000	0	110,000,000	0	850,000,000	0	850,000,000
Mar-20	70,000,000	40,000,000	0	110,000,000	0	850,000,000	0	850,000,000
Apr-20	110,000,000	0	0	110,000,000	850,000,000	0	0	850,000,000
May-20	110,000,000	0	0	110,000,000	850,000,000	0	0	850,000,000
Jun-20	110,000,000	0	0	110,000,000	850,000,000	0	0	850,000,000
Jul-20	110,000,000	0	0	110,000,000	850,000,000	0	0	850,000,000
Aug-20	110,000,000	0	0	110,000,000	850,000,000	0	0	850,000,000
Sep-20	110,000,000	0	0	110,000,000	850,000,000	0	0	850,000,000
Oct-20	110,000,000	0	500,000	110,500,000	850,000,000	0	0	850,000,000
Nov-20	110,000,000	0	500,000	110,500,000	850,000,000	0	0	850,000,000
Dec-20	110,000,000	0	500,000	110,500,000	850,000,000	0	0	850,000,000
Jan-21	110,000,000	0	500,000	110,500,000	850,000,000	0	0	850,000,000
Feb-21	110,000,000	0	500,000	110,500,000	850,000,000	0	0	850,000,000
Mar-21	110,000,000	0	500,000	110,500,000	850,000,000	0	0	850,000,000

~~62.~~63. Generally, the actual quantity made available in each auction, for each ASEP will be less than the ***Obligated Entry Capacity*** stated in the obligation summary report. The quantity made available will take account of any capacity sold and reserved (and not already returned to the market, e.g. by way of Shipper User ceasing to be a User) in previous auctions.

~~63.~~64. Table 2 from the Obligation Summary report (published within the Long-Term Summary report) shows the Obligated Quantity Unsold, i.e. the quantity available, which is referred to in UNC as **Unsold NTS Entry Capacity**. This is derived from the 'Monthly Release Obligation' (the total amount of ***Obligated Entry Capacity***) less any sold **Firm NTS Entry Capacity** less any **Reserved Entry Capacity.** An example is shown below.

Table 2: Obligated Quantity Sold and Unsold (*for illustrative purposes only*)

Month	ASEP A					ASEP B				
	A					B				
	Monthly Release Obligation	Obligated Firm Quantity Sold	Quantity Reserved	Obligated Quantity Unsold and not Reserved	Non-Obligated Sold	Monthly Release Obligation	Obligated Firm Quantity Sold	Quantity Reserved	Obligated Quantity Unsold and not Reserved	Non-Obligated Sold
	kWh/d	kWh/d	kWh/d	kWh/d	kWh/d	kWh/d	kWh/d	kWh/d	kWh/d	kWh/d
May-16	110,000,000	5,000,000	0	105,000,000	0	850,000,000	850,000,000	0	0	0
Jun-16	110,000,000	5,000,000	0	105,000,000	0	850,000,000	850,000,000	0	0	0
Jul-16	110,000,000	5,000,000	0	105,000,000	0	850,000,000	850,000,000	0	0	0
Aug-16	110,000,000	5,000,000	0	105,000,000	0	850,000,000	850,000,000	0	0	0
Sep-16	110,000,000	5,000,000	0	105,000,000	0	850,000,000	850,000,000	0	0	0
Oct-16	110,000,000	110,000,000	0	0	2,000,000	850,000,000	850,000,000	0	0	0
Nov-16	110,000,000	110,000,000	0	0	2,000,000	850,000,000	850,000,000	0	0	0
Dec-16	110,000,000	110,000,000	0	0	2,000,000	850,000,000	850,000,000	0	0	0
Jan-17	110,000,000	110,000,000	0	0	2,000,000	850,000,000	850,000,000	0	0	0
Feb-17	110,000,000	110,000,000	0	0	2,000,000	850,000,000	850,000,000	0	0	0
Mar-17	110,000,000	110,000,000	0	0	2,000,000	850,000,000	850,000,000	0	0	0
Apr-17	110,000,000	5,000,000	0	105,000,000	0	850,000,000	850,000,000	0	0	0
May-17	110,000,000	5,000,000	0	105,000,000	0	850,000,000	850,000,000	0	0	0
Jun-17	110,000,000	5,000,000	0	105,000,000	0	850,000,000	850,000,000	0	0	0
Jul-17	110,000,000	5,000,000	0	105,000,000	0	850,000,000	850,000,000	0	0	0
Aug-17	110,000,000	5,000,000	0	105,000,000	0	850,000,000	850,000,000	0	0	0
Sep-17	110,000,000	5,000,000	0	105,000,000	0	850,000,000	850,000,000	0	0	0
Oct-17	110,000,000	10,000,000	0	100,000,000	0	850,000,000	100,000,000	0	750,000,000	0
Nov-17	110,000,000	10,000,000	0	100,000,000	0	850,000,000	100,000,000	0	750,000,000	0
Dec-17	110,000,000	10,000,000	0	100,000,000	0	850,000,000	100,000,000	0	750,000,000	0
Jan-18	110,000,000	5,000,000	0	105,000,000	0	850,000,000	300,000,000	350,000,000	200,000,000	0
Feb-18	110,000,000	5,000,000	0	105,000,000	0	850,000,000	300,000,000	350,000,000	200,000,000	0
Mar-18	110,000,000	5,000,000	0	105,000,000	0	850,000,000	300,000,000	350,000,000	200,000,000	0
Apr-18	110,000,000	5,000,000	0	105,000,000	0	850,000,000	300,000,000	350,000,000	200,000,000	0
May-18	110,000,000	5,000,000	0	105,000,000	0	850,000,000	300,000,000	350,000,000	200,000,000	0
Jun-18	110,000,000	5,000,000	0	105,000,000	0	850,000,000	300,000,000	350,000,000	200,000,000	0
Jul-18	110,000,000	5,000,000	0	105,000,000	0	850,000,000	300,000,000	350,000,000	200,000,000	0
Aug-18	110,000,000	5,000,000	0	105,000,000	0	850,000,000	300,000,000	350,000,000	200,000,000	0
Sep-18	110,000,000	5,000,000	0	105,000,000	0	850,000,000	300,000,000	350,000,000	200,000,000	0
Oct-18	110,000,000	5,000,000	20,000,000	85,000,000	0	850,000,000	300,000,000	350,000,000	200,000,000	0
Nov-18	110,000,000	5,000,000	20,000,000	85,000,000	0	850,000,000	300,000,000	350,000,000	200,000,000	0
Dec-18	110,000,000	5,000,000	20,000,000	85,000,000	0	850,000,000	300,000,000	350,000,000	200,000,000	0
Jan-19	110,000,000	5,000,000	20,000,000	85,000,000	0	850,000,000	300,000,000	350,000,000	200,000,000	0
Feb-19	110,000,000	5,000,000	20,000,000	85,000,000	0	850,000,000	300,000,000	350,000,000	200,000,000	0
Mar-19	110,000,000	5,000,000	20,000,000	85,000,000	0	850,000,000	300,000,000	350,000,000	200,000,000	0

~~64.~~65. National Grid is obliged to make available the unsold quantity in each auction as determined below in paragraphs 67 to 75.

~~65.~~66. In addition to the quantities determined below, National Grid may make available additional quantities of capacity, including ***Non-obligated Entry Capacity*** (see Part B).

QSEC auction and the Ad-hoc QSEC auction

~~66.~~67. In order to ensure some capacity is available for later auctions a proportion, 10%, of the ***Non-incremental Obligated Entry Capacity*** is with-held from both the QSEC auction and the Ad-hoc QSEC auction. For the avoidance of doubt this will also be applied when calculating the **Available NTS Entry Capacity** proposed for reservation for a PARCA Application.

~~67.~~68. For each ASEP for each quarter the quantity of **Firm NTS Entry Capacity** that National Grid is obliged to make available for sale[27] is:

- 0.9 * ***Non-incremental Obligated Entry Capacity***; plus
- ***Legacy Incremental Entry Capacity***; plus
- ***Funded Incremental Obligated Entry Capacity***; minus
- All sold **Firm NTS Entry Capacity** (but excluding any previously sold ***Non-obligated Entry Capacity***) minus
- All **Reserved[28] Entry Capacity**

AMSEC auction

~~68.~~69. For each ASEP for each month the quantity of **Firm NTS Entry Capacity** that National Grid is obliged to make available for sale is:

- ***Non-incremental Obligated Entry Capacity***; plus
- ***Legacy Incremental Entry Capacity***; plus
- ***Funded Incremental Obligated Entry Capacity***; minus
- All sold **Firm NTS Entry Capacity** (but excluding any previously sold ***Non-obligated Entry Capacity***) minus
- All **Reserved[29] Entry Capacity**

RMTNTSEC auction

~~69.~~70. For each ASEP for the relevant month the quantity of **Firm NTS Entry Capacity** that National Grid is obliged to make available for sale is:

- ***Non-incremental Obligated Entry Capacity*** plus
- ***Legacy Incremental Entry Capacity***; plus
- ***Funded Incremental Obligated Entry Capacity***; minus
- All previously sold **Firm NTS Entry Capacity** (but excluding any previously sold ***Non-obligated Entry Capacity***)

~~70.~~71. In accordance with UNC TPD Section B2.3, capacity is also made available by the transferring of unsold, or trading of sold, capacity from other ASEPs. A Shipper User may also surrender unwanted capacity which may be utilised at the same ASEP to meet a request for capacity from another Shipper User. Such quantities will be determined pursuant to National Grid's Entry Capacity Transfer and Trade Methodology Statement which can be found at: https://www.nationalgridgas.com/capacity/capacity-methodology-statements~~http://www2.nationalgrid.com/UK/Industry-Information/Gas-capacity-methodologies/Entry-Capacity-Transfer-and-Trade-Methodology-Statement/~~

DSEC auction

[27] Due to the 10% withheld, the unsold quantity may be greater than the quantity made available in the QSEC auction.
[28] For the avoidance of doubt this will include capacity has been identified in the project proposal as being available for reservation under an IP PARCA in accordance with UNC EID E Section 7.
[29] For the avoidance of doubt this will include capacity has been identified in the project proposal as being available for reservation under an IP PARCA in accordance with UNC EID E Section 7.

~~71.~~72. Without prejudice to paragraph 73, for each ASEP, for the relevant Gas Flow Day, the quantity of **Firm NTS Entry Capacity** that National Grid is obliged to make available for sale is:

- ***Non-incremental Obligated Entry Capacity***; plus
- ***Legacy Incremental Entry Capacity***; plus
- ***Funded Incremental Obligated Entry Capacity***; minus
- All previously sold **Firm NTS Entry Capacity** (but excluding any previously sold ***Non-obligated Entry Capacity***)

~~72.~~73. Where, in respect of any given Gas Flow Day, circumstances arise in which National Grid foresees a capacity constraint occurring at an ASEP, National Grid may withhold capacity from sale for that ASEP in the DSEC auction. The quantity withheld will be limited to that which National Grid considers necessary to avoid the constraint or to avoid increasing the extent of the constraint, and hence to avoid, or limit, the cost of any actions needed to manage the constraint.

~~73.~~74. Where the circumstances referred to in paragraph 73 cease to exist or become less severe, National Grid may reduce the quantity withheld accordingly.

DISEC auction

~~74.~~75. For each ASEP for the relevant Gas Flow Day the quantity of **Interruptible NTS Entry Capacity** that National Grid is obliged to make available for sale will be determined as:

- the Use It or Lose It quantity; which is:
  - The average amount by which the **Firm NTS Entry Capacity** held by Shipper Users in aggregate exceeds the energy allocated to Shipper Users for each day over a 30 day period up to (and including) the day falling seven days before the first day of the relevant period , as determined in accordance with UNC TPD Section B2.5.11; plus
- an additional quantity (if any) determined at the sole discretion of National Grid.

Discretionary NTS Entry Capacity auction

~~75.~~76. The ASEPs where **Discretionary NTS Entry Capacity** is to be made available, and the quantity, will be determined on a case by case basis at the sole discretion of National Grid. Such release will be consistent with the overriding obligations in paragraph16.

~~76.~~77. **The Discretionary NTS Entry Capacity** auction may make available unsold ***Obligated Entry Capacity*** and /or ***Non-obligated Entry Capacity***.

PART B: INCREMENTAL ENTRY CAPACITY RELEASE

CHAPTER 4: CONTEXT

~~77.~~78. Part B of this Statement details how, and under what circumstances, Shipper Users can obtain **Firm NTS Entry Capacity** in excess of the prevailing ***Obligated Entry Capacity*** level. Such excess capacity is classed for regulatory purposes as ***Incremental Entry Capacity***.

~~78.~~79. ***Incremental Entry Capacity*** is further classified as:

- ***Non-obligated Entry Capacity*** (see chapter 8), where ***Incremental Entry Capacity*** is released at the discretion of National Grid; or
- ***Incremental Obligated Entry Capacity***, where, provided that the requirements of this Part B are satisfied, National Grid is obliged to make ***Incremental Entry Capacity*** available.

~~79.~~80. ***Incremental Obligated Entry Capacity*** (see chapters 5 to 7) is made available through:

- investment in additional pipeline infrastructure[30] for which additional funding is normally provided (i.e. it is ***Funded Incremental Obligated Entry Capacity***); or
- substitution of unsold ***Non-incremental Obligated Entry Capacity*** from other ASEPs. Hence the ***Non-incremental Obligated Entry Capacity*** will increase at one ASEP and decrease at one or more other ASEPs, and National Grid will receive no additional funding.
- Use of existing infrastructure.

~~80.~~81. Entry capacity substitution will only be considered if the requirements of this Statement are satisfied for the release of ***Incremental Obligated Entry Capacity***. Entry capacity substitution shall be carried out in accordance with the ECS (see paragraph 34).

[30] National Grid may identify contractual alternatives to investment.

CHAPTER 5: INCREMENTAL OBLIGATED ENTRY CAPACITY

~~81.~~82. Shipper Users may apply for **Firm NTS Entry Capacity** above the prevailing level of ***Obligated Entry Capacity*** via any of the two processes which are detailed in the UNC (TPD Section B2). These processes allow requests for capacity:

- At any time, by entering into a PARCA. This is the only way that **Firm NTS Entry Capacity** above the prevailing level of ***Obligated Entry Capacity*** will be available to Shipper Users, where the allocation of that capacity would result in the release of ***Funded Incremental Obligated Entry Capacity***. National Grid will not release ***Funded Incremental Obligated Entry Capacity*** by any other process; and
- Within the Annual QSEC Auction (subject to paragraph 113~~111~~) – held in March of each year. A Revenue Driver is not required for capacity to be released through this process.

~~82.~~83. A non-User ("Reservation Party") will only be able to reserve **Firm NTS Entry Capacity** via the PARCA process.

~~83.~~84. Any relevant information provided to National Grid in advance of a formal bid (or in advance of a PARCA Application) will not be binding on the applicant. Subject to any requirement for industry consultation and industry notifications under UNC or the Licence; any information provided to National Grid will be treated in confidence.

~~84.~~85. The Licence defines a default lead-time for the release of ***Funded Incremental Obligated Entry Capacity*** of 24 months from the first day of the next month (see paragraphs 119~~117~~ to 122~~120~~) following allocation of that capacity[31]. By entering into a PARCA, National Grid and the customer can undertake a significant proportion of the necessary Works, e.g. planning, environmental and design activities, before the Shipper User (or Nominated User) is required to commit to being allocated the reserved **Quarterly NTS Entry Capacity**. This will minimise the risk of:

- a Shipper User being required to make a significant commitment before their project is ready;
- physical capacity, to make ***Funded Incremental Obligated Entry Capacity*** available, being delivered after it is required by the Shipper User[32]; and
- National Grid undertaking unnecessary Works.

~~85.~~86. Each ASEP must be included in the Licence by the appropriate date before ***NTS Entry Capacity*** can be offered for release, or allocated under a PARCA.

~~86.~~87. The appropriate date for an ASEP to be included in the Licence as required by paragraph 86 is

(a) the day before the relevant QSEC auction invitation letter is issued; or
(b) In respect of a PARCA, the date a revenue driver is required to be included in the Licence in accordance with the Generic Revenue Driver Methodology Statement; or
(c) in respect of a PARCA, where (b) does not apply, the day before any **Reserved Entry Capacity** is due to be allocated .

This process may take several months so it is important that potential customers contact National Grid as early as possible.

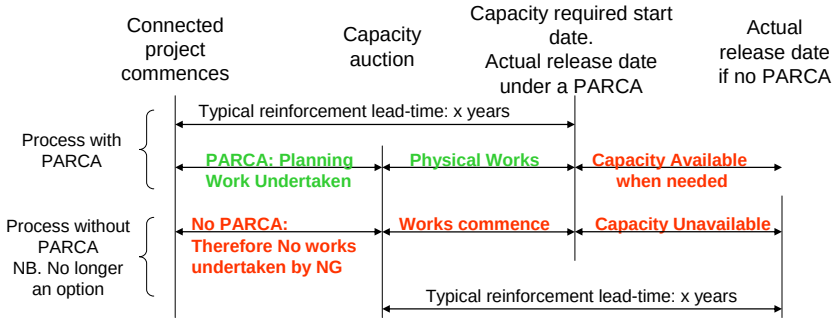
[31] Please note that lead-times for capacity release where demand for Funded Incremental Obligated Entry Capacity is to be satisfied via substitution of Non-Incremental Obligated Entry Capacity from another ASEP are detailed in the ECS.
[32] Alternative capacity products may be available for use between capacity being required and the physical delivery date.

Planning and Advanced Reservation of Capacity Agreements

~~87.~~88. To enable National Grid project timelines for the delivery of new NTS pipeline infrastructure to better align to the timeline of customers' projects, National Grid shall (at the request of the Shipper User or Reservation Party) enter into a PARCA in advance of the potential allocation of **Firm NTS Entry Capacity**. (See diagram below)

~~88.~~89. Shipper Users are not obliged to enter into a PARCA and this does not exclude Shipper Users from bidding for capacity in the QSEC auction with the objective of obtaining the release of **Incremental NTS Entry Capacity**. However, any such bids may be rejected (see paragraph 115~~113~~).

Illustration of the Purpose and Benefits of the PARCA



~~89.~~90. A PARCA can also be used by Shipper Users and Reservation Parties to reserve **Quarterly NTS Entry Capacity** where such applications are not expected to require the release of ***Funded Incremental Obligated Entry Capacity***, i.e. where the capacity request can be satisfied:

(a) From any **Unsold NTS Entry Capacity**: and/or
(b) By entry capacity substitution; and/or
(c) From the use of existing infrastructure.

~~90.~~91. A PARCA is the only way that a Reservation Party can access **Firm NTS Entry Capacity** for subsequent allocation to a Nominated User(s).

~~91.~~92. By entering into a PARCA Shipper Users and Reservation Parties are guaranteed, subject to the terms and conditions of the PARCA, the release of **Firm NTS Entry Capacity**. Prior to agreeing a PARCA, the Shipper User or Reservation Party is required to:

(a) provide National Grid's Gas Contract Portfolio Team[33] with a PARCA Application, which will include information on, for example, location, required quantity of capacity, first gas date; and
(b) commit to paying a non-refundable Phase 1 PARCA Fee[34], calculated in accordance with the Gas Transmission Connection Charging Methodology (UNC TPD Section Y~~ Part A 2~~); and~~.~~

[33] Contact can be made with the Gas Contract Portfolio team via e-mail to: box.ukt.customerlifecycle@nationalgrid.com
[34] This will be reconciled such that only actual costs incurred are paid.

~~(b)~~(c) Obtain an indicative capacity indicator from National Grid. The indicator will be green, amber or red.

93. Upon a PARCA Application being deemed competent, National Grid will commence the initial works under the PARCA Application (the "Phase 1 PARCA Works")[35]. In accordance with the terms of the PARCA, a direct payment will not be required for subsequent phases of work. However, a termination fee maybe payable, in the event of termination, for the reservation of capacity under Phase 2 of the PARCA.

94. Following receipt of a competent PARCA Application, National Grid will confirm the capacity indicator to the applicant

(a) Within ten (10) business days where the indicator is green or red;

(b) within twenty (20) business days where the indicator is amber.

~~92.~~ The capacity indicator may be reassigned by National Grid if for reasons outside its control the completion of Phase 1 PARCA Works will be delayed, and/or if there are further PARCAs received during the PARCA window.

~~93.~~95. In accordance with UNC TPD Section B1.16, a competent PARCA Application for **NTS Entry Capacity** may trigger the opening of a PARCA Entry window. The PARCA Entry Window is a period of time where any competent PARCA Applications for **NTS Entry Capacity** received are guaranteed to be considered together with and alongside the original PARCA Application in determining how and when the **NTS Entry Capacity** requested will be reserved. Additionally, a competent PARCA Application for **NTS Entry Capacity** may trigger an invitation to Users to participate in an Ad-hoc QSEC Auction for **Unsold NTS Entry Capacity** in accordance with paragraph 53.

~~94.~~96. The information provided in the PARCA Application is necessary so that Phase 1 PARCA Works processes can be completed, in particular,

- identification of likely PARCA timescales and/or any opportunities for substitution of capacity from other ASEPs; and
- the ~~inclusion of the~~ ASEP must be recognised by the Licence in accordance with the requirements of Special Condition 5F~~the Licence if not already included~~.

~~95.~~97. The information provided in the PARCA Application may be used in a number of external processes, including Revenue Driver discussions with the Authority and shall inform planning applications so should not be misleading, but should be the Shipper User's or Reservation Party's best assessment of their future requirements. Where requirements change National Grid will endeavour to accommodate such changes in accordance with the terms of the PARCA.

~~96.~~98. Subject to, and in accordance with, the terms of the UNC and the PARCA Application, National Grid will:

(a) Undertake such network analysis as is necessary to identify how the capacity request can be satisfied; e.g.
   1) From any **Unsold NTS Entry Capacity**;
   2) From the use of existing infrastructure;
   3) By entry capacity substitution;
   4) Through investment and/or contractual alternatives;
   5) A combination of the above.

(b) Determine the date that the requested capacity will be registered from, which may or may not be the date originally requested by the applicant.

[35] UNC TPD Section B1.16.4 includes provisions that provide an option for the initialisation of the Phase 1 PARCA works to be delayed by National Grid until the outcomes / impacts of the annual application process are known. This allows any interactions of the PARCA and Application processes to be assessed and considered on a case by case basis.

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99. The phase 1 works report shall be completed within the following timescales:

(a) Within 3 months where the capacity indicator is green and the PARCA window is closed within 20 business days.

(b) Within 4 months where the capacity indicator is green and the PARCA window remains open after 20 business days.

(c) Within 6 months where the capacity indicator is red.

~~97.~~100. Subject to, and in accordance with, the terms of a PARCA, National Grid will:

(a) Reserve, on behalf of the Shipper User (or Reservation Party) the requested capacity from the determined date(s) and at the ASEP identified in the PARCA. Such date(s) may be amended pursuant to the PARCA.

(b) Reserve any **Unsold NTS Entry Capacity** from suitable donor ASEPs for subsequent substitution to the ASEP identified in the PARCA. Any such capacity shall be identified in accordance with the ECS.

(c) Publish relevant information relating to any capacity reservation, allocation, and/or substitution in accordance with UNC and pursuant to the PARCA. This is to facilitate transparency and aid Shipper User decision making.

(d) Undertake such Works as are necessary to deliver ***Incremental Obligated Entry Capacity*** to facilitate the allocation of the requested **Firm NTS Entry Capacity**.

(e) Allocate, on behalf of the Shipper User (or Nominated User) the **Reserved Entry Capacity** from the date(s) identified in the PARCA. Such date(s) may be amended pursuant to the PARCA.

(f) Substitute previously reserved capacity from suitable ASEPs to the ASEP identified in the PARCA. Any such capacity shall be identified in accordance with the ECS and the substitution will be subject to non-veto by the Authority.

~~98.~~101. Subject to, and in accordance with, the terms of the UNC, the counterparty:

(a) shall pay the Phase 1 PARCA Fee; and

(b) may, at the completion of the Phase 1 PARCA Works, sign a PARCA under which capacity will be reserved.

~~99.~~102. Subject to, and in accordance with, the terms of the PARCA, the counterparty:

(a) shall provide security in respect of capacity reservation; and

(b) shall provide such information, (the demonstration information) to National Grid by the Demonstration Date(s). National Grid may not proceed with the next phase of Works under the PARCA until receipt of the demonstration information. Any delay in providing the demonstration information may result in the capacity release date being deferred or in termination of the PARCA; and

(c) may, in the event of termination of the PARCA, be invoiced for the PARCA Termination Amount pursuant to the PARCA.
This will be calculated in accordance with the Gas Transmission Connection Charging Methodology (UNC TPD Section Y ~~Part A 2~~).

(d) may, upon completion of the Phase 2 PARCA Works, request that capacity is allocated (if a Reservation Party this must be via a Nominated User).

(e) may, at any time, terminate the PARCA subject to the payment of any outstanding amounts under the PARCA.

Where the PARCA is terminated and National Grid determine that any **Reserved Entry Capacity** cannot be used for another PARCA currently in progression, any unsold **Reserved Entry Capacity** shall be made available to the market as Unsold NTS Entry Capacity through existing processes.

~~100.~~103. Subject to, and in accordance with the terms of the PARCA, the counterparty, where the counterparty is a Reservation Party:

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a) shall nominate one or more Shipper Users to be allocated and registered as holding the entire quantity of **Firm NTS Entry Capacity**, at the location, and from the date(s) determined and reserved pursuant to the PARCA. The nomination must be received from the Reservation Party by the date determined pursuant to the PARCA and the notice of nomination shall be consistent with the terms of the PARCA.

After nomination of such Shipper User(s) (assuming the nominations are not rejected in accordance with the terms of the PARCA and/or UNC) and acceptance by the Nominated User(s), and at a time determined in accordance with the PARCA, the Nominated User(s) will be Registered as holding such amounts of **Firm NTS Entry Capacity** as if they had initially bid for the capacity in accordance with paragraph 82 above.

~~101.~~104. In accordance with UNC TPD Section B, **Reserved Entry Capacity** does not constitute part of a **User's Available Firm NTS Entry Capacity** until it has been registered to that Shipper User, pursuant to a PARCA.

~~102.~~105. National Grid will require a Revenue Driver (calculated in accordance with the methodology produced pursuant to Licence Special Condition 9C and referred to in paragraph 106~~104~~) to be agreed between National Grid and the Authority and published for the ASEP before progressing beyond the Phase 2 PARCA Works if it is to release ***Incremental Obligated Entry Capacity*** at that ASEP. This is necessary to ensure adequate funding of any works that may result from a PARCA.

~~103.~~106. A methodology for the determination of Generic Revenue Drivers has been consulted upon with the industry and approved by the Authority. This will facilitate the determination of Revenue Drivers, where required, for the incremental quantity likely to be released. National Grid will determine a revenue driver, specific to the relevant ASEP, for either a fixed incremental quantity or a range of incremental capacity (as will be detailed in the PARCA). Whether a fixed quantity or range based Revenue Driver is requested will depend upon the information available to National Grid at the time the Revenue Driver is requested.

107. After calculating the Revenue Driver, National Grid will identify if there is a material change in residual capacity constraint risk, arising from the proposed investment/contract solution, and hence may propose changes to the Constraint Management target as per Special Condition 3B Part J of the Licence.

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Requests from Reservation Parties.

~~105.~~108. Non-Users (Reservation Parties) may reserve **Firm NTS Entry Capacity** for subsequent allocation to a Shipper User(s) (a Nominated User(s)) via the process which is detailed in the UNC (TPD Section B). This process allows reservation at any time, by entering into a PARCA. This is the only way that **Firm NTS Entry Capacity** will be available for allocation to a Nominated User.

~~106.~~109. A Nominated User will not be registered as holding any **Reserved Entry Capacity** until all the capacity reserved is designated by the Reservation Party to one or more Nominated Users.

~~107.~~110. The PARCA process for Reservation Parties will be, subject to the nomination process, consistent with the UNC PARCA process for Shipper Users.

~~108.~~111. A Reservation Party shall:

- consistent with paragraph 102~~100~~(a) provide security; and
- consistent with paragraph 92(b), pay the Phase 1 PARCA Fee.

These will be calculated in accordance with the Gas Transmission Connection Charging Methodology (UNC TPD Section Y ~~Part A 2~~).

~~109.~~112. National Grid may not undertake any construction activities to reinforce the NTS until all the capacity reserved is allocated to one or more Nominated Users.

QSEC Auction

~~110.~~113. Subject to paragraph 115~~113~~, and in accordance with UNC (TPD Section B2), Shipper Users may bid for additional **Firm NTS Entry Capacity** at each ASEP in the annual QSEC Auction (see paragraph 67 for more details on this auction).

~~111.~~114. All bids for **Firm NTS Entry Capacity** shall be made on Gemini.

~~112.~~115. Where Shipper Users' bids for additional **Firm NTS Entry Capacity** at any ASEP exceed, in aggregate, the unsold **Available NTS Entry Capacity** such bids shall be rejected except that bids shall be accepted to the extent that they can be satisfied:

a) Through any **Unsold Available NTS Entry Capacity**;
b) By entry capacity substitution; or
c) From the release of ***Non-obligated Entry Capacity*** in accordance with paragraph 118~~116~~.

~~113.~~116. Not Used

~~114.~~117. A Revenue Driver will not be needed in respect of **Firm NTS Entry Capacity** made available through the QSEC Auction.

~~115.~~118. National Grid may make available **Firm NTS Entry Capacity** at ASEPs in excess of the ***Obligated Entry Capacity***. This will be in accordance with incentives and obligations in the Licence. Any capacity so released will be ***Non-obligated Entry Capacity***. Consistent with paragraph 46, release of ***Non-obligated Entry Capacity*** will not create an on-going obligation to make that level of capacity available in future auctions.

Capacity Release Lead Times

~~116.~~119. Subject to paragraph 34, following reservations and allocations pursuant to a PARCA for increases in **Firm NTS Entry Capacity**, National Grid will undertake such Works as it considers necessary to make such increases available.

~~117.~~120. A request for **Firm NTS Entry Capacity** which requires the release of ***Funded Incremental Obligated Entry Capacity*** will only be progressed if pursuant to a PARCA. Where a PARCA has been entered into National Grid shall, on the allocation date specified in the PARCA, allocate the **Firm NTS Entry Capacity** effective from the registration date specified in the PARCA.

~~118.~~121. Where paragraph 120~~118~~ applies subject to the terms of the PARCA, the allocation shall be confirmed with an effective date no earlier than 24 months from the first day of the next month following allocation, once all of the following have been satisfied:

- National Grid has received formal notification of the granting of all necessary planning consents; and
- All relevant Shipper Users have notified National Grid, pursuant to the PARCA, that they wish to progress with the allocation; and
- All Demonstration Information has been provided to National Grid.

Hence National Grid shall apply a default lead-time for the release of ***Funded Incremental Obligated Entry Capacity*** of 24 months commencing from the first day of the next month following allocation.

~~119.~~122. Notwithstanding paragraph 121~~119~~, National Grid shall use reasonable endeavours to meet an earlier delivery date where requested. For the avoidance of doubt, requests can be for 1st of months October, January, April or July.

~~120.~~123. Consistent with paragraph 120~~118~~, in the absence of a PARCA, National Grid will reject any applications for increases in **Quarterly NTS Entry Capacity** where this requires the release of ***Funded Incremental Obligated Entry Capacity***. Therefore, without a PARCA, **Quarterly NTS Entry Capacity** will only be made available through the QSEC auction in accordance with paragraph 53.

Entry Capacity Notice

~~121.~~124. Where National Grid believes, pursuant to the application of the methodology detailed in this Statement (except where paragraph 33 applies), that there is, or will be, demand for **Incremental NTS Entry Capacity**, National Grid will make a proposal (in an Entry Capacity notice consistent with paragraph 23 and pursuant to Special Condition 5F of the Licence) to the Authority to release ***Incremental Obligated Entry Capacity***, detailing the volumes to be treated as:

- ***Non-incremental Obligated Entry Capacity*** where the demand for additional capacity can be satisfied in whole or in part through entry capacity substitution (in accordance with Special Condition 9A of the Licence); and/or
- ***Funded Incremental Obligated Entry Capacity***.

~~122.~~125. Not Used

~~123.~~126. Consistent with the Licence and the UNC, the release of **Firm NTS Entry Capacity** is a firm commercial capacity right that may be offered on a daily basis or multiples thereof: it does not reflect a commitment or obligation upon National Grid to undertake any investment on its network.

Remuneration for Release of Incremental Obligated Entry Capacity.

~~124.~~127. This Statement has been developed in good faith reflecting National Grid's understanding of the statutory obligations attached to both National Grid and the Authority, and its understanding of the regulatory framework which ensures continued remuneration of properly incurred expenditure on regulated assets.

~~125.~~128. For the avoidance of doubt, National Grid believes that any release of ***Incremental Obligated Entry Capacity*** is subject to approval by the Authority, whether explicitly in

response to a specific proposal contained in an Entry Capacity notice submitted to the Authority pursuant to Special Condition 5F Part B of the Licence or implicitly through the establishment and application of the methodology specified in this Statement.

~~126.~~129. National Grid believes that, by giving that approval, the Authority accepts that the implications of applying the methodology, including subsequent investment undertaken by National Grid with a view to physically meeting the demand for ***Funded Incremental Obligated Entry Capacity***, should be reflected in subsequent regulatory decisions, notably regarding proposals to modify the price controls and incentives defined within the Licence.

~~127.~~130. In this context, National Grid believes that any such approval should be regarded as establishing an expectation that associated investment should be reflected in its assumed regulatory asset value[36]; that any proposals for revising the quantities of ***Obligated Entry Capacity*** should be demonstrably consistent with the entry capacity incentive structure (such that the terms on which capacity may have previously been released will not be significantly altered for either National Grid or Shipper Users); and that proposals for revising the Entry Capacity Constraint Management incentive parameters should demonstrably allow for the level of ***Incremental Obligated Entry Capacity*** released. National Grid believes this is consistent with the Authority's duty to ensure National Grid is able to finance its functions.

Methodology Objective

~~128.~~131. The primary purpose of the methodology, detailed in Part B of this Statement, for determining ***Incremental Obligated Entry Capacity*** volumes is to indicate the way in which National Grid will interpret the results of long term entry capacity auctions in terms of whether or not to seek to allocate **Incremental NTS Entry Capacity** to Shipper Users. In considering this, National Grid believes it is appropriate to consider the financial incentives it faces under conditions of the Licence, in particular as a result of Special Condition 3A " Restriction of NTS System Operation Revenue" and Special Condition 2A: "Restriction of NTS Transportation Owner Revenue". However, National Grid also believes it is important for the assessment to be set in the context of its wider obligations. The methodology set out in Part B of this Statement therefore seeks to describe the circumstances in which National Grid believes there would (or would not) be a sufficient signal from entry capacity auctions to create a presumption in favour of releasing ***Incremental Obligated Entry Capacity***.

[36] National Grid understands that, as with the approach to price controls to date, Ofgem would wish to assure itself that any such capital expenditure had been efficiently incurred.

CHAPTER 6: ~~DECISION MAKING METHODOLOGY~~Net Present Value (NPV) Test

~~129.~~132. Information for considering whether or not to release ***Incremental Obligated Entry Capacity*** will be based on indications of Shipper Users' (or Reservation Parties') demand for **Incremental NTS Entry Capacity** as revealed by the relevant processes referred to in paragraph 82. ~~described in UNC. Please note that the PARCA processes are described in paragraphs 88 to 110~~.

133. In ~~accordance with the requirements of UNC TPD Section B2 and paragraph~~ a QSEC auction~~82~~ Shipper Users will be invited to indicate, for each of a set of prices, the quantity of **Quarterly NTS Entry Capacity** they wish to acquire (if any) at each ASEP, in each available period. These prices will be published in National Grid's Statement of the Gas Transmission Transportation Charges. ~~The pricing methodology used to generate these prices is included in Chapter 7, and forms part of this methodology.~~

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~~130.~~ In a PARCA, Shipper Users will submit the quantity of Quarterly NTS Entry Capacity they wish to acquire as per paragraph 54. Any premium to be applied in addition to the reserve price will be determined on a project specific basis.

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~~131. The pricing methodology establishes the prices per unit of capacity which are the minimum National Grid would expect to receive over a sustained period in order to justify releasing ***Incremental Obligated Entry Capacity*** at any given ASEP (or making additional ***Non-Incremental Obligated Entry Capacity*** available at any given ASEP through entry capacity substitution).~~

134. The P_0 price is the reserve~~at~~ price at which National Grid would release ***Obligated Entry Capacity***, in response to valid bids (or pursuant to a PARCA). All bids will be accepted so long as the available quantity is not exhausted. This minimum available quantity will be calculated in accordance with paragraph 68~~68~~ and ~~the appropriate Tables in~~ Special Condition 5F of the Licence, and will be published in the invitation referred to in paragraph 133~~131~~.

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~~132.~~

~~133. The incremental prices for each step of ***Incremental Obligated Entry Capacity*** (P_1 to P_{20}) are based on the long run incremental cost of providing additional ***Firm Entry Capacity*** above the prevailing ***Obligated Entry Capacity*** level at each ASEP.~~

~~134. As described in Chapter 7, incremental prices have been calculated for each price step by estimating the cost associated with physically providing each level of ***Incremental Obligated Entry Capacity***, annuitising the cost, and adding this value to the P_0 price. This approach produces price steps whereby the change in National Grid's income from bidders (or PARCA signatories), assuming all of the available quantity is sold at the incremental price step is equal to the estimated cost of providing that additional capacity over the period in question.~~

Estimated Project ~~Value~~Cost & Premium

135. For the purposes of determining the required commitment from ~~bidders (or~~ PARCA signatories~~)~~ ~~that would normally~~to trigger the release of ***Incremental Obligated Entry Capacity***, ~~should auction bids (or the proposed capacity/price profile) satisfy the test given in paragraph 143,~~ an estimated project ~~value~~ cost will be calculated for ~~each~~ the requested amount of ***Incremental Obligated Entry Capacity***.

~~135.~~ The initial estimated project cost will be provided to the applicant prior to the reservation of capacity, and shall be calculated in accordance with the methodology in appendix 1. ~~level from the final incremental step prices as detailed in the Gas Transmission Transportation Charging Methodology (UNC TPD Section Y Part A1).~~

136.

137. The final estimated project cost will be provided to the applicant prior to the allocation of capacity, and shall be calculated by annually applying inflation each year that has passed from the moment that capacity was reserved. (Inflation will be taken from Ofgem's Price Control Financial Model, which is updated annually, hence not referenced here).

138. For any PARCAs that have progressed into PARCA phase 2, then the initial estimated project cost shall be the prevailing Project Value at the time of implementation of version [5.0] of this Statement, and the final estimated project cost will be determined by applying inflation annually from the date of implementation of v5.0 of this Statement.

139. The methodology for proposing that ***Incremental Obligated Entry Capacity*** should be released (described below) compares the strength of market signals for ***Incremental Entry Capacity*** against the estimated project ~~value~~ cost for providing that level of ***Incremental Obligated Entry Capacity***.

~~136.~~

Procedure for Releasing and Allocating Incremental Obligated Entry Capacity

Qualifying Bids

~~137.~~140. In accordance with UNC processes all **Quarterly NTS Entry Capacity** (QSEC) bids posted by the end of the bid process will be assessed. Only bids that satisfy the relevant Shipper User credit and security requirements as specified in UNC will be considered in this procedure.

QSEC Auction Obligated Entry Capacity Allocation

~~138.~~141. Where the aggregate quantity specified in valid bids at the P_0 price is less than or equal to the available quantity of **Unsold NTS Entry Capacity** (less any capacity reserved pursuant to a PARCA) then capacity will be allocated to satisfy all requests in full (see Part A). The "available quantity" will be determined in accordance with Chapter 3 and specifically paragraph 68.

Incremental Obligated Entry Capacity Release and Allocation

142. In respect of any ASEP where a minimum quantity of **Firm NTS Entry Capacity** is demanded (whether by bids placed in the QSEC auction or through agreement of a PARCA) in excess of the **Unsold NTS Entry Capacity** (minus that reserved pursuant to any PARCAs)

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~~in any quarter~~, National Grid will consider releasing ***Incremental Obligated Entry Capacity*** via a PARCA or ***Non-obligated Entry Capacity*** via a QSEC Auction to meet that demand.

143. The amount of ***Incremental Obligated Entry Capacity*** signalled for release will be the lesser of:

(a) the highest common amount requested in excess of the **Unsold NTS Entry** Capacity in 4 different gas years; and

~~139.~~(b) the highest amount that satisfies a duration equal to the **PARCA minimum duration quantity.**

~~140.~~144. National Grid will, for the quarter in question plus the subsequent thirty one quarters (or less where this would be beyond the period for which capacity has been offered)~~,~~ determine the net present value (NPV) of the revenue from the sum of:

(a) ~~bids for **Quarterly NTS Entry Capacity** placed in the QSEC auction which would be accepted if the demand for ***Incremental Obligated Entry Capacity*** could be met by Entry Capacity Substitution in accordance with the ECS or as the case may be ***Non-obligated Entry Capacity***~~the requested amount of ***Incremental Obligated Entry Capacity*** multiplied by the combined Reserve Price plus premium price (if any); ~~or~~

~~(b)~~ the requested amount of **Unsold NTS Entry Capacity** multiplied by the premium price (if any).~~the capacity quantity/price profile requested for by the Shipper User or Reservation Party pursuant to a PARCA (see also paragraph 146) which would be accepted if ***Incremental Obligated Entry Capacity*** was to be released equal to the quantity of **Quarterly NTS Entry Capacity** requested.~~

~~141.~~145. The "quarter in question" will normally be the first quarter following the lead time referred to in paragraph 121~~19~~ where the aggregate volume of valid bids received and/or capacity quantity/profile requested first exceeds or equals the **Unsold NTS Entry Capacity** (minus that reserved pursuant to any PARCAs) plus the quantity of ***Incremental Obligated Entry Capacity*** that is being considered. However, in respect of the QSEC auction, at any given ASEP more than one quantity of ***Incremental Obligated Entry Capacity*** may be considered in which case the ~~NPV~~ quantity duration test in paragraph 143 may be applied from more than one quarter. The ~~NPV~~ test will be applied to each incremental quantity / quarter independently, i.e. to the extent that quantities / quarters overlap, some bids may be considered in more than one test. In all cases, all values will be discounted to the relevant quarter on a quarterly basis using a pre-tax real annual discount factor of 5.05% plus inflation (inflation will be taken from Ofgem's Price Control Financial Model, which is updated annually, hence not referenced here).

146. For QSEC, ~~W~~where an Incremental Entry Capacity quantity has been identified under paragraph 143, and

~~142.~~(a) ~~paragraph 141(a) applies, if the NPV equals at least 50% of the "estimated project value", and~~ the ***Incremental Entry Capacity*** can be made available through Entry Capacity Substitution, then National Grid would make a proposal to the Authority to release that quantity of **Firm NTS Entry Capacity** as ***Non-incremental Obligated Entry Capacity*** under the terms of the Licence as detailed in paragraph 124~~122~~ with a corresponding decrease in the quantity of ***Non-incremental Obligated Entry Capacity*** at one or more donor ASEPs. There would be a presumption that such ***Non-incremental Obligated Entry Capacity*** should be released and allocated to Shipper Users.

~~143. The "estimated project value" for each capacity level will be calculated in accordance with the Gas Transmission Transportation Charging Methodology (UNC TPD Section Y Part~~

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~~A1) and will be published alongside incremental step prices. A simple example showing how the NPV test works is given in Appendix 1.~~

~~144.~~(b) Where ~~paragraph 141(a) applies, if the NPV does not equal at least 50% of the "estimated project value", and/or~~ the ***Incremental Entry Capacity*** cannot be made available through Entry Capacity Substitution then National Grid would not make a proposal to the Authority to release that quantity of **Firm NTS Entry Capacity** as ***Non-incremental Obligated Entry Capacity***. ***Incremental Obligated Entry Capacity*** would not be released and would not be allocated to Shipper Users. However, **Firm NTS Entry Capacity** may be made available through the release of ***Non-obligated Entry Capacity*** pursuant to Chapter 8.

~~145.~~147. ~~Where paragraph 141(b) applies~~For PARCA applications, the NPV test will be applied, using the capacity quantity~~/price~~ information provided by the Shipper User or Reservation Party, at two stages:

(a) After Phase 1 PARCA Works, to inform ~~whether capacity should be reserved (utilising indicative prices)~~the applicant of the indicative premium payable (if any) before capacity is reserved and the project progresses to phase 2; and

(b) After Phase 2 PARCA Works, to inform the applicant of the premium payable prior to ~~whether~~ capacity being ~~should be~~ allocated to the Shipper User (or Nominated User).

~~146. Where paragraph 146(a) applies, if the NPV equals at least 50% of the "estimated project value", then National Grid will reserve ***Obligated Entry Capacity*** at the relevant ASEP.~~

~~147.~~148. Where the Phase 1 PARCA Works identifies that the requirement for ***Obligated Entry Capacity*** can be satisfied, in part or whole, through Entry Capacity Substitution, National Grid will publish a notice, subject to paragraph 22, of the intention to reserve that quantity of **Firm NTS Entry Capacity** as ***Non-incremental Obligated Entry Capacity*** with a corresponding reduction of existing ***Non-incremental Obligated Entry Capacity*** at one or more donor ASEPs, pursuant to the ECS. There would be a presumption that such ***Non-incremental Obligated Entry Capacity*** should be reserved at the recipient ASEP for later substitution and allocation to Shipper Users.

~~148.~~149. Throughout the duration of the PARCA up to the end of the Phase 2 PARCA Works, National Grid will assess whether the requested **Firm NTS Entry Capacity** can be met, in part or whole, through Entry Capacity Substitution. Where such an assessment identifies that Substitutable Capacity (as defined in the Entry Capacity Substitution Methodology Statement) has become available, compared to that identified through the Phase 1 PARCA Works a further proposal as detailed in paragraph 1~~147~~5 will be made to the Authority.

~~149. Where paragraph 146(a) applies, if the NPV does not equal at least 50% of the "estimated project value", then National Grid would not make a proposal to the Authority to release and/or reserve capacity at any ASEP. Subject to the terms of the PARCA, the Shipper User or Reservation Party would need to re-submit its capacity quantity/price profile, such that it passes the NPV test, if it wants to reserve capacity. The release of ***Non-obligated Entry Capacity*** would not be considered at this stage.~~

150.

~~150.~~151. ~~Where paragraph 146(b) applies, if the NPV equals at least 50% of the "estimated project value", then~~ Before the end of phase 2, National Grid ~~would~~ will submit a proposal to the Authority for the release of that quantity of **Firm NTS Entry Capacity** as either:

- ***Funded Incremental Obligated Entry Capacity*** which will be released and allocated to Shipper Users: and/or
- ***Non-incremental Obligated Entry Capacity*** with a corresponding decrease in the quantity of ***Non-incremental Obligated Entry Capacity*** at one of more donor ASEPs.

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The additional ***Non-incremental Obligated Entry Capacity*** at the recipient ASEP will be released and allocated to Shipper Users.

152. Where, for the given incremental signal, not enough incremental user revenue is generated at the Reserve price, then a premium can be added. The premium will be the lowest price (to 4 decimal places) that can be added to the Reserve Price to allow 50% of the estimated project cost to be recovered.

153. It should be noted that the estimated project cost will be reduced proportionally by the amount of the incremental signal that can be satisfied via substitution. This means that in the event that the solution is 100% substitution then the financial element of the NPV test is considered to automatically be met and no premium will be required.

~~151. Where paragraph 146(b) applies, if the NPV does not equal at least 50% of the "estimated project value", then National Grid will not allocate that quantity of **Firm NTS Entry Capacity** previously reserved and ***Incremental Obligated Entry Capacity*** will not be released. However, **Firm NTS Entry Capacity** may be made available through the release of ***Non-obligated Entry Capacity*** pursuant to Chapter 8.~~

~~152.~~154. In the event that the NPV test is not passed and capacity (excluding ***Non-obligated Entry Capacity***) is not allocated, the PARCA will be terminated and paragraph 102~~100~~(c) will apply.

Timing of Release of Incremental Obligated Entry Capacity

~~153.~~155. Following satisfactory capacity/price profiles ~~submitted~~ being agreed pursuant to a PARCA (i.e. that pass the NPV test) and a proposal for the release and allocation of ***Incremental Obligated Entry Capacity***[37] not being vetoed by the Authority, National Grid has obligations to make that capacity available from a point in the future. In order to deliver against these obligations, National Grid may undertake such system reinforcements as it considers necessary.

~~154.~~156. In the event that National Grid's proposals are vetoed by the Authority, National Grid will not release ***Incremental Obligated Entry Capacity*** and may remove any associated **Firm NTS Entry Capacity** allocated to Shipper Users, but may alternatively, at its sole discretion, release ***Non-Obligated Entry Capacity*** in accordance with chapter 8.

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[37] QSEC bids above the Obligated levels at an ASEP can only be allocated via Entry Capacity Substitution or the release of ***Non-obligated Entry Capacity***. Any release met by Entry Capacity Substitution will be in accordance with the ECS.

CHAPTER 7: ~~INCREMENTAL OBLIGATED ENTRY CAPACITY PRICING METHODOLOGY~~INCREMENTAL STEP SIZES FOR QSEC

~~**Introduction**~~

~~155. The objective of the ***Incremental Obligated Entry Capacity*** pricing methodology is to produce a range of price steps which affords Shipper Users an opportunity to signal their requirement for **Firm NTS Entry Capacity**, but which ensures such requirements take account of the estimated project value for providing **Firm NTS Entry Capacity** beyond the prevailing level of ***Obligated Entry Capacity***. The underlying cost assumptions are forward looking and are informed by present day cost estimates for pipe laying and associated activities to provide new capacity.~~

~~**Derivation of Long Run Marginal Costs and Long Run Incremental Costs**~~

~~156. The Long Run Incremental Cost (LRIC) approach derives costs which represent the cost of providing capacity to transport increments of gas through the NTS. The LRIC methodology uses the Long Run Marginal Cost (LRMC) methodology described within the Gas Transmission Transportation Charging Methodology (UNC TPD Section Y Part A1). Whilst the LRMC methodology considers only the marginal costs associated with a given supply and demand scenario, the LRIC methodology considers various incremental capacity levels above a given ***Obligated Entry Capacity*** level to calculate the estimated incremental costs of moving from the prevailing ***Obligated Entry Capacity*** level to the incremental capacity level.~~

~~157. The NTS Capacity Charging Model is used to calculate LRMCs and comprises:~~

- ~~**The Transport Model** that calculates the LRMCs of transporting gas from each entry point (for the purposes of setting **NTS Entry Capacity** prices) to a "reference node" and from the "reference node" to each relevant offtake point.~~
- ~~**The Tariff Model** that adjusts the LRMCs to maintain an equal split of revenue between Entry and Exit Users (where entry prices are used to set auction reserve prices).~~

~~These models are described in more detail in the Gas Transmission Transportation Charging Methodology (UNC TPD Section Y Part A1).~~

~~158. Prices for each Gas Year are calculated using the relevant year's 1-in-20 peak supply and demand data and network model (e.g. if setting entry capacity prices for Gas Year 2018/19, the 2018/19 supply/demand forecast and network model are used).~~

~~159. The P_0 price for each ASEP is set equal to the Reserve Price, determined at the prevailing ***Obligated Entry Capacity*** level in accordance with the Gas Transmission Transportation Charging Methodology (UNC TPD Section Y Part A1).~~

~~160. Price steps above P_0 (i.e. P_1, P_2 and so on) which reflect ***Incremental Obligated Entry Capacity*** are set by adjusting supply flows from the base case data to reflect the appropriate incremental capacity level at each ASEP.~~

~~161. For each price step, the marginal distances (i.e. the distance which an incremental entry flow would travel) derived from this process are compared to the marginal distance corresponding to the prevailing ***Obligated Entry Capacity*** level.~~

~~162. The differential between the marginal distances is then used to calculate the capital cost of accommodating the incremental entry flow (for that price step). The capital costs are annuitised and adjusted to reflect the calorific value at that ASEP.~~

~~163. The price steps are also adjusted to ensure that a progression of prices is established i.e. there is a minimum price step size between successive price steps. This is required to allow a cleared price to be established in the auction.~~

~~164. Normally, this results in a price progression that increases with the increment of capacity (an ascending price curve). A price progression that decreases with incremental capacity level may also be observed, usually for new ASEPs where connecting pipeline costs are added to the initial price progression.~~

Incremental Step Sizes for Existing ASEPs

~~165.~~157. UNC TPD Section B2.1.5 defines **Incremental NTS Entry Capacity** as the amount of **Firm NTS Entry Capacity** (if any) in excess of the **Unsold NTS Entry Capacity** for which National Grid may (but shall not be required to) invite applications.

~~166.~~158. Subject to paragraphs 157~~165~~ and 0~~169~~, the incremental step sizes to be offered at auction are dependent upon the prevailing level of ***Obligated Entry Capacity*** at each ASEP. In accordance with the UNC (Section B – 2.2.3 (c) & (d)), twenty increments will be offered.

~~167.~~159. For the avoidance of doubt, at any given time, the prevailing ***Obligated Entry Capacity*** level incorporates:

a) ***Legacy Incremental Entry Capacity*** that was released in previous regulatory periods (i.e. before 1st April 2013) ~~-~~that is, for Licence purposes, still treated under the System Operator incentive scheme; plus

b) ***Non-incremental Obligated Entry Capacity*** which comprises of

- ***Licence Baseline Entry Capacity*** as set out ~~within Table 4 of~~in Special Condition 5F of the Licence; plus
- ***Legacy TO Entry Capacity*** set out within ~~Table 6 of~~ Special Condition 5F of the Licence,

either of which may be adjusted ~~by the quantities set out within Table 5 of Special Condition 5F of the Licence, i.e.~~ as a result of capacity substitution to or from the ASEP as a result of National Grid's Entry Capacity Substitution methodology; plus

c) ***Funded Incremental Obligated Entry Capacity*** that has previously been released pursuant to Part B of this Statement during the RIIO-T1 regulatory period (i.e. in QSEC auctions held in or after April 2013).

~~168. Price steps will usually be based on releasing capacity increments equal to 2.5% of the prevailing **Obligated Entry Capacity** level at the relevant ASEP. For example, the second price step (P_2) represents the minimum price at which valid bids for at least 105% of **Obligated Entry Capacity** would need to be received before National Grid would consider releasing **Incremental Obligated Entry Capacity** equivalent to 5% of the prevailing **Obligated Entry Capacity** level at that ASEP.~~

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~~169.~~161. Fewer increments will be specified at the smallest ASEPs. At ASEPs that have a prevailing ***Obligated Entry Capacity*** level that is less than 300GWh per day then the following will apply;

- In the first instance National Grid will determine the number of 15GWh increments required to offer no less than 50% of the ***Obligated Entry Capacity*** level. The chosen increment size approximates to the increment that would be required if 300GWh is offered in 20 equal sized increments.
- No less than five increments are permitted. In instances where the application of a 15GWh increment infers that less than five increments will be required then a quantity that is equivalent to no less than 50% of the prevailing ***Obligated Entry Capacity*** level at the relevant ASEP will be divided into five equal sized increments.

~~170.~~162. Additional price steps might be required in circumstances where demand is expected to exceed 150% of the prevailing ***Obligated Entry Capacity*** level. Broadly this circumstance can arise at locations that have previously experienced high demand and at new ASEPs where no ***Obligated Entry Capacity*** has previously been released. This may be informed by a PARCA.

~~171.~~163. At ASEPs where the planning process has signalled to National Grid's satisfaction that more than 50% capacity above the prevailing ***Obligated Entry Capacity*** level may be demanded in a given year, National Grid would set price steps on the basis of quantities which were expected to exceed the indicated demand.

~~172.~~164. ~~At ASEPs where a PARCA has been agreed and t~~The quantity of ***Incremental Obligated Entry Capacity*** proposed to be released pursuant to ~~that~~ a PARCA is not required to ~~to~~ equal an incremental quantity determined by the above methodology~~, National Grid shall adjust the step size and/or number of steps so that one of the incremental step quantities is equal to the quantity of ***Incremental Obligated Entry Capacity*** proposed to be released pursuant to that PARCA~~.

Incremental Step Sizes for New ASEPs

~~173. From time to time demand may emerge for **Firm NTS Entry Capacity** at new ASEPs. When, through its planning process, a requirement for a new ASEP has been demonstrated to National Grid's satisfaction (this may include the entering into of a PARCA) a price schedule will be published for subsequent long-term entry capacity auctions. Preservation of commercial confidentiality is an important consideration when developing a new ASEP and therefore National Grid will publish price steps that seek to preserve confidentiality with respect to expected deliverability.~~ Steps will continue to be produced for the purposes of the QSEC auction.

~~174.~~165. For new ASEPs the number of incremental price steps will be fixed at 20 steps of equal size. The incremental step size will be;

- One twentieth of 150% of the capacity requirement signalled to National Grid through its planning process and/or the PARCA, subject to:
- A minimum incremental step size of 5GWh.

~~175.~~166. Where a new ASEP is required to be established, National Grid will initiate the process necessary ~~to modify~~for the Licence ~~such that~~to recognise the new ASEP in accordance with the requirements of Special Condition 5F, and an appropriate revenue driver (calculated in

accordance with the methodology produced pursuant to Licence Special condition 9C and referred to in paragraph 106~~104~~), where required in accordance with paragraph 105~~103~~, is~~are~~ stated in the Licence. Until ~~such modifications to the~~the necessary Licence work is complete, ~~are effective~~ National Grid will not include the proposed new ASEP in any QSEC auctions (or any other capacity auction) and ***Entry Capacity*** will not be available for release at the proposed new ASEP.

~~176. The methodology, which applies for new ASEPs, is consistent with the methodology outlined above for existing ASEPs, except that there is one main difference:~~

- ~~In the case of National Grid building any connecting pipe between the existing NTS and the proposed new ASEP, an estimate of the extension costs will be annuitised and added to each of the incremental step prices (P_1 to P_{20}). Any request to build a connecting pipeline must be agreed with National Grid in a timely manner to allow a reasonable estimate of the extension costs to be obtained.~~

~~**Pricing Recalculation for new ASEPs**~~

~~177. From time to time, when National Grid believe that there has been a substantial change to cost drivers, including the supply/demand balance, investment cost assumptions or network topology, it will be appropriate for National Grid to recalculate price schedules in light of any change. It is not anticipated that release of ***Non-obligated Entry Capacity*** (see chapter 8) would normally trigger such a re-calculation unless the release is for a sustained period.~~

CHAPTER 8: NON-OBLIGATED ENTRY CAPACITY RELEASE

~~178.~~167. In any of the processes identified in paragraphs 53 (excluding DISEC), 1~~5~~4 and 55 National Grid may, at its sole discretion, release additional quantities of **Firm NTS Entry Capacity** in excess of the prevailing ***Obligated Entry Capacity***. Such capacity is referred to as ***Non-obligated Entry Capacity.***

~~179.~~168. ***Non-obligated Entry Capacity*** may be released in response to bids placed by Shipper Users in the relevant entry capacity auctions and/or through the PARCA process. National Grid will assess the risks and rewards associated with releasing the quantity of **Firm NTS Entry Capacity** requested in order to determine the quantity to be released and allocated to Shipper Users.

Accelerated Release Incentive

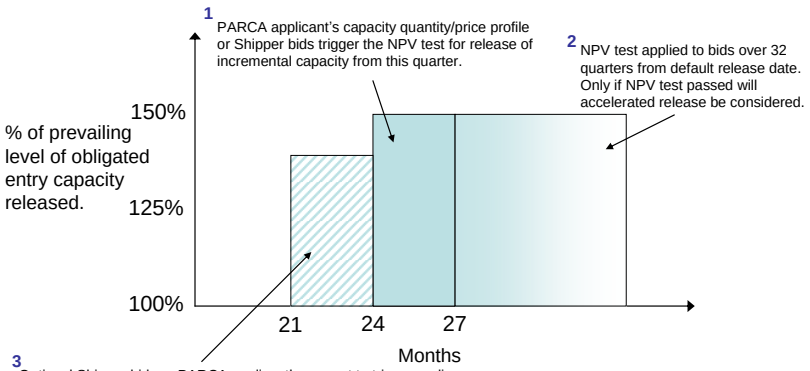
~~180.~~169. The Licence (Special Condition 3B Part K) establishes an incentive mechanism which encourages National Grid to make ***Incremental Obligated Entry Capacity*** available to Shipper Users in advance of the default lead time in certain circumstances, known as 'accelerated release'. For Licence purposes this capacity is classified as ***Non-obligated Entry Capacity*** but is still **Firm NTS Entry Capacity** for Shipper User purposes.

~~181.~~170. As stated in paragraph 8, it is important that Shipper Users (or Reservation Parties) discuss potential new projects and increased requirements at existing ASEPs with National Grid at an early stage and, where possible, enter into a PARCA.

~~182.~~171. National Grid may release ***Non-obligated Entry Capacity*** under the accelerated release incentive as shown in diagram 4 below. Such release will be subject to satisfaction of the following two criteria:

- PARCA capacity/price profiles satisfying the NPV test referred to in paragraph 151~~150~~. For the avoidance of doubt, the test shall be applied from the default October Y+3 lead time; and
- Satisfactory assessment by National Grid of the associated risks and rewards.

Diagram 4: Example of Accelerated Release



~~183.~~172. PARCA Applicants can signal their requirement for the release of ***Non-obligated Entry Capacity*** under the accelerated release incentive at any ASEP (provided that National Grid has indicated in the QSEC auction invitation letter that it may, consistent with UNC TPD Section B2.1.5(b), release **Incremental NTS Entry Capacity**), irrespective of whether discussions have taken place in accordance with paragraph 170~~181~~, by placing, in the QSEC auction, appropriate bids ahead of the lead time. In all cases National Grid shall undertake the risk / reward assessment, and hence decide whether to release ***Non-obligated Entry Capacity***, after completion of the QSEC auction.

~~184.~~173. Capacity will only be released under the accelerated release incentive to satisfy (in whole or part) actual bids received. This means, for example, that if Shipper Users signal a requirement for a quantity of **Incremental NTS Entry Capacity** as identified below:

- Months 25 to 27: quantity Q which can be met through accelerated release (***Non-obligated Entry Capacity***)
- Months 28 to 30: no bids
- Months 31 onwards: quantity Q which will be met through release of ***Incremental Obligated Entry Capacity***

then National Grid will have no obligation to release any ***Non-obligated Entry Capacity*** for months 28 to 30 in any future auction, including monthly auctions.

~~185.~~174. In accordance with paragraph 33 National Grid may also release ***Non-obligated Entry Capacity***, with or without the need for investment, in the absence of an unambiguous auction signal.

PART C: INTERCONNECTION POINT CAPACITY

IP's Only

CHAPTER 9: CONTEXT

~~186.~~175. **Interconnection Point Capacity** is **NTS Entry Capacity** made available to Shipper Users at an Interconnection Point ASEP (IP ASEP) through a series of capacity auctions. This Part C identifies the processes by which the prevailing level of ***Obligated Entry Capacity***, the **Technical Interconnection Point Capacity**, will be made available to Shipper Users via Interconnection Point capacity auctions (IP auctions) and via Interconnection Point Planning and Advanced Reservation of Capacity Agreements (IP PARCAs). These processes are detailed in UNC EID Section B and E. Reference should be made to UNC for further information.

~~187.~~176. The prevailing level of **Technical Interconnection Point Capacity**, in respect of any auction excludes any ***Non-obligated Entry Capacity*** (see Chapter 13 paragraph 243~~251~~) released in previous auctions.

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~~188.~~177. Dependent upon the specific auction, ***Entry Capacity*** may be made available as **Firm Interconnection Point Capacity** or **Interruptible Interconnection Point Capacity**.

~~189.~~178. The **Technical Interconnection Point Capacity** level will be published for each IP ASEP at least once per year in the "entry capacity release obligation summary report". This report is published pursuant to Part D of Special Condition 9B of the Licence and is incorporated within the Long-Term Summary report (see also paragraphs 1~~57~~ to 64) which can be found on National Grid's website by following the link to 'past auction data' at https://www.nationalgridgas.com/capacity/entry-capacity. Note that 'Technical Capacity' is referred to as 'release obligation' within the report.~~http://www2.nationalgrid.com/uk/industry-information/gas-transmission-system-operations/capacity/entry-capacity-auction/.~~

~~190.~~179. The quantity of **Technical Interconnection Point Capacity** to be made available at each Interconnection Point ASEP in each IP auction will be published by the Capacity Platform Operator[38]. Chapter 10 of this Statement details how these quantities are determined.

[38] At the implementation date of the regulation on Capacity Allocation Mechanisms, PRISMA European Capacity Platform GmbH is designated as Capacity Platform Operator in relation to all Interconnection Points.

CHAPTER 10: AUCTION PROCESSES FOR THE RELEASE OF INTERCONNECTION POINT CAPACITY.

~~191.~~180. **Interconnection Point Capacity** at an IP ASEP will be made available in a variety of yearly, quarterly, monthly and daily auctions. The long term auctions use an 'ascending clock' mechanism, and the short term auctions use a 'uniform price' mechanism to allocate capacity. ~~which~~ Further information on the auctions ~~are~~ is detailed in UNC EID Section B. National Grid will release capacity consistent with the processes and obligations defined in UNC.

~~192.~~181. These IP auctions make available daily capacity (i.e. a daily right to deliver gas into the NTS at an IP ASEP on a particular Gas Flow Day) in yearly, quarterly, monthly and single daily strips. In respect of daily auctions only, capacity may be available as either **Firm Interconnection Point Capacity** and/or as **Interruptible Interconnection Point Capacity**.

~~193.~~182. Each IP auction has a reserve price. The Reserve Price calculation is intended to:

- ensure that the total income that National Grid expects to receive through the auctions is reasonably consistent with the income it is allowed to receive in accordance with the Licence. Any variation from the allowed revenue is corrected through commodity charges (based on actual flows).
- ensure that prices are cost reflective. IP ASEPs that are further away from demand centres tend to have higher reserve prices. Similarly, as gas input at larger IP ASEPs penetrates further into the system the reserve prices for these IP ASEPs will generally be higher.
- Subject to paragraph 183~~194~~, ensure that at IP ASEPs where there is limited competition for capacity that a cost reflective price is paid for that capacity.

183. The ascending clock auctions also make use of large and small price steps. The reserve price, large price step and small price step, are all produced in accordance with the Gas Transmission Transportation Charging Methodology.

~~194.~~184. At least one IP auction will result in a clearing allocation[39] in which National Grid will use reasonable endeavours to make available all the available **Technical Interconnection Point Capacity** at each IP ASEP, subject to paragraph 200~~209~~. This auction will have a zero reserve price[40], unless otherwise stated in the prevailing Gas Transmission Transportation Charging Statement. The Within-Day Auction of **Daily Firm Interconnection Point Capacity** is the clearing auction.

~~195.~~185. **Firm Interconnection Point Capacity** may be made available as either:

(a) **Bundled Interconnection Point Capacity**, consisting of **NTS Entry Capacity** allocated in combination with an adjacent Transmission System Operator's (TSO's) Interconnection Point exit capacity for an equal quantity and duration; or

(b) **Unbundled Interconnection Point Capacity**, consisting of **NTS Entry Capacity** only.

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[39] In respect of an IP ASEP and period, an allocation of ***Entry Capacity*** which either:
(a) results in all the Entry Capacity offered for sale being sold; or
(b) has a reserve price of zero, unless otherwise stated in the Gas Transmission Transportation Charging Statement.

[40] Please note that if capacity is bundled, the overall auction reserve price may be greater than zero due to the Adjacent transporter component of the price, although the NTS Reserve Price component will be zero.

~~196.~~186. In any auction of **Firm Interconnection Point Capacity**, the quantity of capacity that shall be designated as Bundled shall be the lesser of:

~~(c)~~(a) the total quantity of **Firm Interconnection Point Capacity** which is available for allocation in that auction (subject to paragraphs 194~~203~~ to 199~~208~~ and Chapter 13 paragraph 243~~251~~); and

~~(d)~~(b) the total quantity of Interconnection Point exit capacity at an adjacent TSO available for allocation in that auction or, where there are two adjacent transporters in the interconnected system, the sum of the exit capacities available for allocation in that auction for both adjacent transporter Interconnection Points.

187. Where there are two adjacent TSO's and rule 182(a) applies (i.e.National Grid has insufficient available capacity to bundle with all the capacity offered by the 2 adjacent TSOs in aggregate), then the 2 auctions of bundled capacity may be competing with each other. In competing auctions then the 2 bundled auctions are linked and where there is overdemand for capacity across these 2 auctions, then economic criteria are applied to establish which auction bids from the 2 auctions will be allocated the capacity. Bundled auctions that are competing are marked as such on PRISMA.

~~197.~~188. Where there is available **Firm Interconnection Point Capacity** in excess of the bundled quantity it will be made available as **Unbundled Interconnection Point Capacity** subject to the maximum allowed quantity. The maximum allowed quantity of **Unbundled Interconnection Point Capacity** that will be made available at an IP ASEP in the Annual Yearly Auction (held in Gas Year Y) will be:

- For Gas Year Y+1:
  - All Unsold Technical Interconnection Point Capacity that is available throughout the Gas Year and has not been designated as bundled
- For Gas Year Y+2 onwards, either:
  - the amount by which the smallest quantity of interconnected system exit capacity allocated to Users at any adjacent transport Interconnection Point[41] for within the relevant Gas Year exceeds the greatest amount of **Interconnection Point Capacity** sold at the relevant IP ASEP for the Gas Year; or
  - 0, if the quantity of **Interconnection Point Capacity** sold at the adjacent Interconnection Point for the Gas Year is less than or equal to the quantity sold at the relevant IP ASEP.

This is illustrated in the diagram below:

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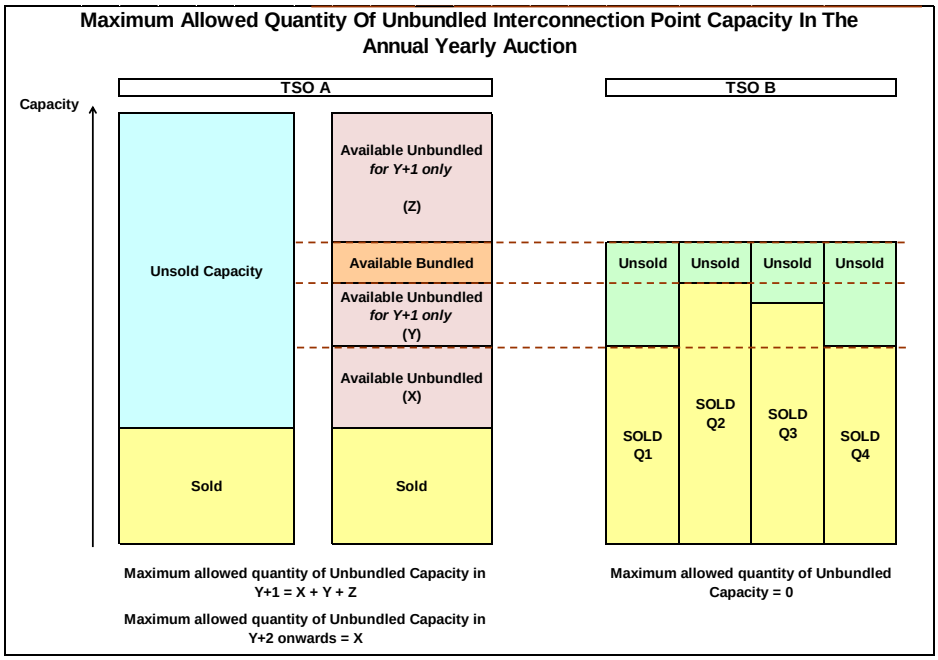
[41] For the avoidance of doubt where there are two adjacent Transporter IPs, the sum of the unbundled interconnected system exit capacity allocated to Users at both adjacent Interconnection Points will be considered.



~~198.~~189. There are six standard IP Auctions, held in accordance with the ENTSOG Auction Calendar[42], through which Shipper Users can obtain **Interconnection Point Capacity**[43]. These are:

- The Annual Yearly Auction for **Yearly Interconnection Point Capacity** is held on an **Annual** basis. In the Annual Yearly Interconnection Point Capacity Auction (currently held in July) National Grid sells **Firm Interconnection Point Capacity** for Gas Years Y+1 to Y+15 (i.e. an auction held in July 2018 will be for capacity release over the period October 2018 to September 2033). Capacity made available in these auctions will be sold as **Yearly Interconnection Point Capacity,** i.e. it will be registered to the Shipper User for each Day in a particular Gas Year.

- The Annual Quarterly Auctions for **Quarterly Interconnection Point Capacity**. In these annual capacity auctions held in August, November, February and May National Grid sells **Firm Interconnection Point Capacity** for each remaining quarter of Gas Year Y+1 (e.g. an auction held in August 2017 will be for capacity release for quarters October 2017 to December 2017, January 2018 to March 2018, April 2018 to June 2018 and July 2018 to September 2018). Capacity made available in these auctions will be sold as **Quarterly Interconnection Point Capacity** (i.e. it will be registered to the Shipper User for each Day in a particular calendar quarter).

[42] Published on an annual basis by ENTSOG for each Auction Year.
[43] Each of the IP Auctions for **Firm Interconnection Point Capacity** shall comprise of separate auctions for Bundled and Unbundled capacity. The Bundled and Unbundled auctions will run in parallel.

- The Rolling Monthly Auction for **Monthly Interconnection Point Capacity**. In this capacity auction held every month National Grid sells **Firm Interconnection Point Capacity** for every day in the following month. Capacity made available in these auctions will be sold as **Monthly Interconnection Point Capacity** (i.e. it will be registered to the Shipper User for each Day in the relevant calendar month).

- Rolling Day-Ahead Auctions for **Daily Firm Interconnection Point Capacity**. In these short term capacity auctions Shipper Users can bid for **Firm Interconnection Point Capacity** on Gas Flow Day D-1 (e.g. capacity can be bid for on 1st of the month for use on the 2nd). Capacity will be allocated on D-1. It will be sold as **Daily Firm Interconnection Point Capacity** (i.e. it will be registered to the Shipper User for the relevant Day only).This auction allows Daily firm capacity to be bought in advance of the Day of use.

- Within-Day Auctions for **Daily Firm Interconnection Point Capacity**. In these short term capacity auctions Shipper Users can bid for **Firm Interconnection Point Capacity** on an hourly basis from D-1 to within Gas Flow Day D. Subject to availability, capacity will be allocated hourly from 1:30am on Day D-1. It will be sold as **Daily Firm Interconnection Point Capacity** (i.e. it will be registered to the Shipper User for the relevant Day only).This auction allows capacity to be bought on the Day of use.

- Interruptible Rolling Day-Ahead Auctions for **Daily Interruptible Interconnection Point Capacity**. In these short term capacity auctions Shipper Users can bid for **Daily Interruptible Interconnection Point Capacity** on Gas Flow Day D-1 (e.g. capacity can be bid for on 1st of the month for use on the 2nd). Capacity will be allocated on D-1. It will be sold as **Daily Interruptible Interconnection Point** (i.e. it will be registered to the Shipper User for the relevant Day only and may be subject to curtailment pursuant to UNC TPD Section B2.9 and EID Section B10.6.1). **Daily Interruptible Interconnection Point Capacity** cannot be bought "on-the-Day". For the avoidance of doubt, **Interruptible Interconnection Point Capacity** will only be offered as Unbundled Capacity.

~~199.~~190. In addition, Shipper Users may also obtain **Interconnection Point Capacity** by secondary trades, otherwise known as a System Capacity Transfers (details can be found in EID Section B9 and UNC TPD Section B5). For the avoidance of doubt, where a Shipper User holds **Bundled Interconnection Point Capacity** this should only be transferred to another Shipper User as **Bundled Interconnection Point Capacity**.

Long Term Summary Report

~~200.~~191. Subject to paragraphs 193~~202~~ and 194~~203~~, the maximum quantity of capacity to be made available in any auction process will be the ***Obligated Entry Capacity***. The ***Obligated Entry Capacity*** is stated for each ASEP (including IP ASEPs), for each month (or quarter) (on a forward looking basis) in the obligation summary report. The obligation summary report is provided within the Long-Term Summary report (details can be found paragraphs 1~~5~~7 to 64).

~~201.~~192. National Grid is obliged to make available the unsold quantity in each auction as determined below in paragraphs 194~~203~~ to 199~~208~~. For the purpose of these calculations the **Unsold Technical Interconnection Point Capacity** shall be considered to be the **Technical Interconnection Point Capacity** minus all previously sold **Firm NTS Entry**

Capacity (but excluding any previously sold ***Non-obligated Entry Capacity***). Please note that where the **Unsold Technical Interconnection Point Capacity** is not constant across the relevant period for an auction, the highest quantity that is available for the entire period will be made available.

~~202.~~193. In addition to the quantities determined below, National Grid may make available additional quantities of capacity, including ***Non-obligated Entry Capacity*** (see Part C Chapter 13).

Annual Yearly Auction

~~203.~~194. In order to ensure some capacity is available for later auctions some **Technical Interconnection Point Capacity** will be withheld from the Annual Yearly Auctions:

(a) For auctions of **Yearly Interconnection Point Capacity** for gas years Y+1 to Y+5, 10%, of the **Technical Interconnection Point Capacity** is with-held.

(b) For auctions of **Yearly Interconnection Point Capacity** for gas years Y+6 to Y+15, 20%, of the **Technical Interconnection Point Capacity** is with-held.

(c) In the event that the quantity of **Unsold Technical Interconnection Point Capacity** is less than that proposed to be with-held for the relevant Gas Year, all **Unsold Technical Interconnection Point Capacity** will be with-held.

~~204.~~195. For each IP ASEP for each Gas Year between Y+1 and Y+5 the quantity of **Yearly Interconnection Point Capacity** that National Grid is obliged to make available for sale is:

- Aggregate conversion quantity for the period;
- **Unsold Technical Interconnection Point Capacity**; minus
- Minimum [0.1* **Technical Interconnection Point Capacity**, **Unsold Technical Interconnection Point Capacity**]***;*** minus
- All **Reserved Entry Capacity;** plus
- Aggregate Surrender Quantity for the capacity period (see paragraphs ~~237~~246 to ~~238~~247); plus
- Aggregate Withdrawal Quantity for the capacity period (see paragraphs ~~239~~248-~~241~~250).

~~205.~~196. For each IP ASEP for each Gas Year between Y+6 and Y+15 the quantity of **Yearly Interconnection Point Capacity** that National Grid is obliged to make available for sale is:

- Aggregate conversion quantity for the period;
- **Unsold Technical Interconnection Point Capacity**; minus
- Minimum [0.2* **Technical Interconnection Point Capacity**, **Unsold Technical Interconnection Point Capacity*]***; minus
- All **Reserved**[44] **Entry Capacity;** plus
- Aggregate Surrender Quantity for the capacity period**;** plus
- Aggregate Withdrawal Quantity for the capacity period**.**

Annual Quarterly Auctions

~~206.~~197. For each IP ASEP for each quarter the quantity of **Quarterly Interconnection Point Capacity** that National Grid is obliged to make available for sale is:

- Aggregate conversion quantity for the period;
- **Unsold Technical Interconnection Point Capacity**; plus

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[44] For the avoidance of doubt this will include capacity has been identified in the project proposal as being available for reservation under an IP PARCA in accordance with UNC EID E Section 7.

- Aggregate Surrender Quantity for the capacity period**;** plus
- Aggregate Withdrawal Quantity for the capacity period**.**

Rolling Monthly Auction

~~207.~~198. For each IP ASEP for the relevant month the quantity of **Monthly Interconnection Point Capacity** that National Grid is obliged to make available for sale is:

- Aggregate conversion quantity for the period;
- **Unsold Technical Interconnection Point Capacity**; plus
- Aggregate Surrender Quantity for the capacity period**;** plus
- Aggregate Withdrawal Quantity for the capacity period**.**

Rolling Day-Ahead and Within-Day Auctions

~~208.~~199. Without prejudice to paragraph 200~~209~~, for each IP ASEP, for the relevant Gas Flow Day, the quantity of **Daily Interconnection Point Capacity** that National Grid is obliged to make available for sale is:

- Aggregate conversion quantity for the period;
- **Unsold Technical Interconnection Point Capacity**

Please note that where **Firm Interconnection Point Capacity** is sold in any auction in kWh/h, the available capacity offered shall be the value available for that Gas Flow Day divided by 24[45].

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~~209.~~200. Where, in respect of any given Gas Flow Day, circumstances arise in which National Grid foresees a capacity constraint occurring at an IP ASEP, National Grid may withhold capacity from sale for that IP ASEP in the Rolling Day-Ahead and Within-Day Auctions. The quantity withheld will be limited to that which National Grid considers necessary to avoid the constraint or to avoid increasing the extent of the constraint, and hence to avoid, or limit, the cost of any actions needed to manage the constraint.

~~210.~~201. Where the circumstances referred to in paragraph 200~~209~~ cease to exist or become less severe, National Grid may reduce the quantity withheld accordingly.

Interruptible Rolling Day-Ahead Auctions

~~211.~~202. For each IP ASEP for the relevant Gas Flow Day the quantity of **Daily Interruptible Interconnection Point Capacity** that National Grid is obliged to make available for sale will be determined as:

- the Use It or Lose It quantity; which is:
  - The average amount by which the **Firm Interconnection Point Capacity** held by Shipper Users exceeds the energy allocated to those Shipper Users for each day over a 30 day period up to (and including) the day falling seven days before the relevant Gas Flow Day; plus
- an additional quantity (if any) determined at the sole discretion of National Grid.

[45] For the avoidance of doubt, when a clock change occurs the value for **Daily Interconnection Point Capacity** shall be the value available for that Gas Flow Day divided by 23 or 25 as appropriate.

CHAPTER 11: INCREMENTAL CAPACITY RELEASE AT INTERCONNECTION POINTS.

~~212.~~203. A Shipper User, or a Reservation Party[46], may apply for **Firm Interconnection Point Capacity** above the prevailing level of **Technical Interconnection Point Capacity**, at an IP ASEP, by entering into an IP PARCA. Provision of a demand indication pursuant to paragraph 207~~216~~, is the method by which the Shipper User or Reservation Party can participate in the IP PARCA process. National Grid will not release ***Funded Incremental Obligated Entry Capacity***, at an IP ASEP, by any other process.

~~213.~~204. The Licence defines a default lead-time for the release of ***Funded Incremental Obligated Entry Capacity*** at an IP ASEP, of 24 months from the first day of the next month (see paragraphs 119~~117~~ to 122~~120~~) following allocation of that capacity[47]. By entering into an IP PARCA, National Grid and the customer can undertake a significant proportion of the necessary Works, e.g. planning, environmental and design activities, before the Shipper User (or Nominated User) is required to commit to being allocated the reserved **Interconnection Point Capacity**. This will minimise the risk of:

(a) a Shipper User being required to make a significant commitment before their project is ready;
(b) physical capacity, to make ***Funded Incremental Obligated Entry Capacity*** available, being delivered after it is required by the Shipper User[48]; and
(c) National Grid undertaking unnecessary Works.

~~214.~~205. Each IP ASEP must be ~~included~~ recognised by the Licence, in accordance with the requirements of Special Condtion 5F, ~~in the Licence~~ by the appropriate date before **Interconnection Point Capacity** can be reserved or allocated pursuant to an IP PARCA.

~~215.~~206. The appropriate date for an IP ASEP to be recognised by ~~included in~~ the Licence, as required by paragraph 202~~214~~ is

(a) In respect of an IP PARCA, the date a revenue driver is required to be included in the Licence in accordance with the Generic Revenue Driver Methodology Statement; or
(b) in respect of an IP PARCA, where (a) does not apply, the day before any **Reserved Entry Capacity** is due to be allocated .

This process may take several months so it is important that potential customers contact National Grid as early as possible.

Incremental Demand Assessment

~~216.~~207. In accordance with UNC EID Section E2, in each odd-numbered year, National Grid will open a demand indication window for a period of eight weeks starting from the date that the Annual Yearly Auction opens. Any Shipper User or Reservation Party may submit a non- binding demand indication during this demand indication window. Alternatively an adhoc demand indication may be submitted at any other time these will be progressed subject to paragraph 213~~222~~.

~~217.~~208. Any relevant information provided to National Grid in advance of the provision of a demand indication will not be binding.

[46] Entering into an IP PARCA is the only way that any interested party can access Incremental **Interconnection Point Capacity** at an IP ASEP and it cannot be obtained via any of the auction processes.
[47] Please note that lead-times for capacity release where demand for ***Funded Incremental Obligated Entry Capacity*** at an IP ASEP is to be satisfied via substitution of ***Non-Incremental Obligated Entry Capacity*** from another ASEP are detailed in the ECS.
[48] Alternative capacity products may be available for use between capacity being required and the physical delivery date.

~~218.~~209. Notwithstanding any confidentiality obligations which National Grid might otherwise have it may share information provided on demand indications with other relevant TSOs.

~~219.~~210. National Grid will confirm receipt of a demand indication within 2 business days and shall respond, within 16 weeks of the start of the Annual Yearly Auction or within 8 weeks for ad-hoc demand indications.

~~220.~~211. A demand indication shall be considered competent if it includes the information detailed in EID section E2.1.4 and the Demand Indication Application Fee (DIA Fee) has been paid.

~~221.~~212. The DIA Fee is equivalent in value to the PARCA Application Fee (also known as the Phase 1 PARCA Fee) which is calculated in accordance with the Gas Transmission Transportation Charging Methodology (UNC TPD Section Y ~~Part A 2~~). The DIA Fee will:

(a) be repaid in full if an incremental project is not initiated following publication of the demand assessment report or if the economic test (described in paragraphs 231~~240~~ to 242) is positive.

(b) be retained if the result of the economic test is negative (including circumstances where parties do not submit a signed IP PARCA and security deposit that could be considered in the economic test or if the applicant withdraws prior to publication of the joint notice referred to in paragraph 219~~228~~). Where it is retained it will be reconciled against actual costs incurred by National Grid between the publication of the demand assessment report and the publication of the joint notice (see paragraph 219~~228~~).

~~222.~~213. For demand indications received outside of the demand indication window (ad-hoc demand indications) National Grid shall:

(a) Where possible incorporate the demand into an existing incremental project at the relevant IP ASEP; or

(b) Provided that it is of the opinion that the economic test can be completed prior to the start of the next biennial demand assessment; open an 8 week (unless otherwise stated) ad-hoc demand indication window, within 5 days, subject to agreement from other relevant TSO(s); and

(c) Inform the applicant when its demand can be considered with justification.

Demand Assessment Report

~~223.~~214. National Grid will publish a demand assessment report, within 16 weeks of the start of the Annual Yearly Auction or for an ad-hoc demand indication within 8 weeks of the closure of the ad-hoc demand indication window. The report, which will follow the standard template as provided by ENTSOG or any other format which National Grid may publish from time to time, will conclude whether any incremental capacity project will progress to the design phase.

Design Phase & Authority Approval.

~~224.~~215. National Grid will conduct a public consultation on its proposals to deliver incremental capacity by no later than 12 weeks from publication of the demand assessment report. The consultation will be open for at least 1 month but no longer than 2 months. This consultation will be conducted jointly with the relevant Adjacent TSO(s) where appropriate.

~~225.~~216. The consultation shall cover the elements detailed in EID E 3.1.4 and shall include the general rules and conditions, included within the IP PARCA contract, to allow reservation of capacity and subsequent allocation to a Shipper User.

~~226.~~217. No later than 3 months, or the earliest time acceptable to the relevant TSO(s), following the end of the consultation process National Grid will submit a project proposal to the Authority for approval. It will include the responses to the consultation, which have not been marked as confidential. Where relevant this will be coordinated with the relevant TSO(s) and other relevant national regulatory authorities.

~~227.~~218. The project proposal will state the proposed allocation mechanism which, subject to Authority approval, will be via the IP PARCA process and include the information detailed in EID E 4.1.4. including but not limited to:

(a) the parameters to be used in the economic test;
(b) offer levels of capacity, reflecting the range of expected demand;
(c) project timescales;
(d) IP PARCA contract including, if applicable, the quantity of funded incremental capacity which may be withheld[49]

~~228.~~219. Following a decision on the incremental capacity project by the Authority, and no later than 2 months before the offer of incremental capacity in the Annual Yearly Auction, National Grid shall prepare and publish a notice of such decision. Where relevant this will be coordinated with the relevant TSO(s) (a joint notice in accordance with EID E 4.2) and other relevant national regulatory authority. Where the incremental capacity project has been approved the notice shall contain the following information:

(a) the information contained in the project proposal;
(b) the contract(s) relating to the capacity offered;
(c) the actual costs incurred by National Grid in completing the design work and whether there is any corresponding adjustment in the DIA Fee; and
(d) whether there is a need for reinforcement works.

Reservation and Allocation of Capacity.

~~229.~~220. Subject to the Alternative Allocation Mechanism which is part of the project proposal and within the timescales[50] set out the counterparty may sign an IP PARCA contract under which capacity will be reserved.

~~230.~~221. Subject to, and in accordance with, the terms of the UNC and the IP PARCA, National Grid will:

(a) Review such network analysis (initially undertaken in the design phase), to confirm how the capacity request can be satisfied; e.g.
    i. From any **Unsold Technical Interconnection Point Capacity**;
    ii. From the use of existing infrastructure;
    iii. By entry capacity substitution;
    iv. Through investment and/or contractual alternatives;
    v. A combination of the above.
(b) Determine the date that the requested capacity will be registered from, which may or may not be the date originally requested by the applicant.

[49] The Incremental Capacity Element of EU Regulation establishing a Network Code on Capacity Allocation Mechanisms (CAM) requires that an amount at least equal to 10% of the incremental technical capacity at the concerned interconnection point shall be set aside and offered at a later date. Where such capacity is to be withheld it will form part of the project proposal and will be included within the IP PARCA.
[50] This shall be 20 business days but may be varied to align with other national regulatory authorities.

~~231.~~222. Subject to, and in accordance with, the terms of an IP PARCA, National Grid will:

(a) Reserve, on behalf of the Shipper User (or Reservation Party) the requested capacity from the determined date(s) and at the IP ASEP identified in the IP PARCA. Such date(s) may be amended pursuant to the IP PARCA.
(b) Reserve any **Unsold Technical Interconnection Point Capacity** from suitable donor ASEPs for subsequent substitution to the IP ASEP identified in the IP PARCA. Any such capacity shall be identified in accordance with the ECS.
(c) Publish relevant information relating to any capacity reservation, allocation, and/or substitution in accordance with UNC and pursuant to the IP PARCA. This is to facilitate transparency and aid Shipper User decision making.
(d) Undertake such Works as are necessary to deliver funded ***Incremental Obligated Entry Capacity*** to facilitate the allocation of the requested **Interconnection Point Capacity**.
(e) Allocate, on behalf of the Shipper User (or Nominated User) the **Reserved Entry Capacity** from the date(s) identified in the IP PARCA. Such date(s) may be amended pursuant to the IP PARCA.
(f) Substitute previously reserved capacity from suitable ASEPs to the IP ASEP identified in the IP PARCA. Any such capacity shall be identified in accordance with the ECS and the substitution will be subject to non-veto by the Authority.

~~232.~~223. Subject to, and in accordance with, the terms of the IP PARCA, the counterparty:

(a) shall provide security in respect of capacity reservation; and
(b) shall provide such information, (the demonstration information) to National Grid by the Demonstration Date(s). National Grid may not proceed with work under the IP PARCA until receipt of the demonstration information. Any delay in providing the demonstration information may result in the capacity release date being deferred or in termination of the IP PARCA; and
(c) may, in the event of termination of the IP PARCA, be invoiced for the IP PARCA Termination Amount pursuant to the PARCA.
    i. This will be calculated in accordance with the PARCA Termination Amount set out in the Gas Transmission Transportation Charging Methodology (UNC TPD Section Y).
(d) may, upon reaching the allocation date, request that capacity is allocated (if a Reservation Party this must be via a Nominated User).
(e) may, at any time, terminate the IP PARCA subject to the terms of the IP PARCA and the payment of any outstanding amounts under the IP PARCA.

Where the IP PARCA is terminated and National Grid determine that any **Reserved Entry Capacity** cannot be used for another PARCA or IP PARCA currently in progression, any unsold **Technical Interconnection Point Capacity** shall be made available to the market as Unsold **Interconnection Point Capacity** through existing processes.

~~233.~~224. Subject to, and in accordance with the terms of the IP PARCA, the counterparty, where the counterparty is a Reservation Party:

(a) shall nominate one or more Shipper Users to be allocated and registered as holding the entire quantity of **Interconnection Point Capacity**, at the location, and from the date(s) determined and reserved pursuant to the IP PARCA. The nomination must be received from the Reservation Party by the date determined pursuant to the IP PARCA and the notice of nomination shall be consistent with the terms of the IP PARCA.
(b) After nomination of such Shipper User(s) (assuming the nominations are not rejected in accordance with the terms of the IP PARCA and/or UNC) and acceptance by the Nominated User(s), and at a time determined in accordance with the IP PARCA, the

Nominated User(s) will be Registered as holding such amounts of **Interconnection Point Capacity** as if they had initially applied for the capacity in accordance with paragraph 203~~212~~.

~~234.~~225. In accordance with UNC TPD Section B, **Reserved Entry Capacity** does not constitute part of a **User's Available Firm NTS Entry Capacity at an IP ASEP** until it has been registered to that Shipper User, pursuant to an IP PARCA.

~~235.~~226. National Grid will require a Revenue Driver (calculated in accordance with the methodology produced pursuant to Licence Special Condition 9C and referred to in paragraph 106~~104~~) to be agreed between National Grid and the Authority and published for the IP ASEP before progressing to the allocation stage if it is to release ***Incremental Obligated Entry Capacity*** at that IP ASEP. This is necessary to ensure adequate funding of any works that may result from an IP PARCA.

~~236.~~227. A methodology for the determination of Generic Revenue Drivers has been consulted upon with the industry and approved by the Authority. This will facilitate the determination of Revenue Drivers, where required, for the incremental quantity likely to be released. National Grid will determine a revenue driver, specific to the relevant IP ASEP, for either a fixed incremental quantity or a range of incremental capacity (as will be detailed in the IP PARCA). Whether a fixed quantity or range based Revenue Driver is requested will depend upon the information available to National Grid at the time the Revenue Driver is requested.

~~237.~~228. After calculating the Revenue Driver, National Grid will identify if there is a material change in residual capacity constraint risk, arising from the proposed investment/contract solution, and hence may propose changes to the Constraint Management target as per Special Condition 3B Part J of the Licence.

Impact on other long term processes

~~238.~~229. In relation to the scenarios envisaged in UNC EID E 7 and in accordance with the rules set out there, where capacity has been identified in the project proposal as being available for reservation it will be prioritised for such reservation and will not be released into any other long term process.

Economic Test

~~239.~~230. The methodology, for proposing that Incremental **Interconnection Point Capacity** should be released, will compare the net present value[51] of proposed capacity commitments against the estimated increase in allowed revenue from the project (calculated in accordance with the Generic Revenue Driver Methodology Statement).

~~240.~~231. National Grid will, for ~~the years in question~~the capacity profile agreed, determine the following parameters:

(a) The net present value of the capacity commitments, calculated as the quantity of proposed incremental **Interconnection Point Capacity** x estimated reserve price (subject to paragraph 242);

[51] A pre-tax real annual discount factor of 5.05% plus inflation (inflation will be taken from Ofgem's Price Control Financial Model, which is updated annually, hence not referenced here).

(b) the net present value of the estimated increase in allowed revenue, calculated in line with the Generic Revenue Driver Methodology Statement[52]. This value will be provided as an estimate in the project proposal.

~~The years in question will be any four years where the aggregate volume of capacity quantity requested exceeds the **Unsold Technical Interconnection Point Capacity** (minus that reserved pursuant to any PARCAs or IP PARCAs).~~

~~241.~~232. The economic test is considered to have been passed if:

$$\frac{R}{AR} \geq f$$

where:

R = the estimated present value of the allocation quantity, calculated in accordance with paragraphs 231~~240~~(a) and 242;

AR = the estimated increase in allowed revenue, described in paragraph 231~~240~~(b);

f = the f-factor; this shall be set to 0.5, unless otherwise directed by the Authority.

The economic test is considered to have failed where $\frac{R}{AR} < f$, in this case a Mandatory Minimum Premium shall be calculated pursuant to paragraph 242. Please note that if the estimated increase in allowed revenue is zero the test will be considered to have passed.

~~242.~~233. The Mandatory Minimum Premium is an additional quantity that may be added to the applicable payable price, calculated to be the minimum value required to allow the Economic Test to be passed in the case where the allocation of all offered incremental capacity at the estimated reference price would not generate sufficient revenues for a positive economic test outcome. An estimate of the mandatory minimum premium will be provided as part of the project proposal. Where a Mandatory Minimum Premium is applied it shall be applied to all capacity allocated via the Alternative Allocation mechanism and shall not be applied to any subsequent capacity release, additionally where it is to be applied the present value of the capacity commitments shall be calculated as the sum of:

i. The quantity of proposed incremental **Interconnection Point Capacity** x (estimated reserve price + Mandatory minimum Premium);
ii. The quantity of unsold **Technical Interconnection Point Capacity** x Mandatory Minimum Premium.

~~243.~~234. In the event that the Economic Test is not passed and capacity (excluding ***Non-obligated Entry Capacity***) is not reserved, the IP PARCA will be terminated.

Timing of Release of Incremental Interconnection Point Capacity

~~244.~~235. Following a positive Economic test and a proposal for the release and allocation of Incremental **Interconnection Point Capacity** not being vetoed by the Authority, National Grid has obligations to make that capacity available from a point in the future. In order to deliver against these obligations, National Grid may undertake such system reinforcements as it considers necessary.

~~245.~~236. In the event that National Grid's proposals are vetoed by the Authority, National Grid will not release Incremental **Interconnection Point Capacity** and may remove any

[52] Subject to Authority approval.

associated **Interconnection Point Capacity** reserved allocated to Shipper Users, but may, at its sole discretion, release ***Non-Obligated Entry Capacity*** in accordance with chapter 13.

CHAPTER 12: CONGESTION MANAGEMENT PROCEDURES

IP's Only

Surrender of Capacity

~~246.~~237. A Shipper User may offer to surrender **Firm Interconnection Point Ca**pacity that may be utilised in an IP auction at the same IP ASEP to meet a request for capacity from another Shipper User. Such offers will only be accepted subject to the Shipper User having sufficient Available Firm Interconnection Point Capacity after taking account of any existing Surrender or withdrawal offers that can be re-allocated and pursuant to UNC EID Section B7.2 and will only be utilised if the surrendered capacity is subsequently allocated to a Shipper User in the relevant Annual Yearly, Annual Quarterly or Rolling Monthly auction.

~~247.~~238. When allocating **Yearly Interconnection Point Capacity, Quarterly Interconnection Point Capacity** or **Monthly Interconnection Point Capacity** following an Annual Yearly, Annual Quarterly or Rolling Monthly auction, surrendered capacity will only be used to meet demand for additional capacity above the prevailing **Technical Interconnection Point Capacity** level. Capacity will be allocated in the following sequence:

- Converted **Interconnection Point Capacity;**
- Unsold **Technical Interconnection Point Capacity**
- Surrendered **Interconnection Point Capacity**
- Withdrawn **Interconnection Point Capacity**
- ***Non-obligated Entry Capacity***

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Withdrawal of Capacity

~~248.~~239. Where a written direction has been received from the Authority, National Grid NTS will submit a withdrawal offer on behalf of the relevant Shipper User for the duration specified. The withdrawal offer quantity will be subject to the Shipper User having sufficient Available Firm Interconnection Point Capacity after taking account of any existing Surrender or withdrawal offers that can be re-allocated.

~~249.~~240. Withdrawal Offers will be entered into the next available Annual Yearly, Annual Quarterly or Rolling Monthly auction and will be used to satisfy demand for **Yearly Interconnection Point Capacity**, **Quarterly Interconnection Point Capacity** or **Monthly Interconnection Point Capacity** once Unsold **Technical Interconnection Point Capacity** and available Surrendered **Interconnection Point Capacity** have been allocated (in accordance with paragraph 238~~247~~).

241. If some or all of the offered withdrawal quantity remains unsold following the auction, the remaining quantity shall be entered into the next relevant yearly, quarterly or monthly auction(s) (subject to paragraph 239~~248~~).

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Capacity Conversion

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242. A Shipper User may request to convert their unbundled Interconnection Point Capacity following a bundled auction. Such requests should be considered in accordance with UNC EID Section B10.2.2. the quantity converted shall be offered in all auctions subsequent to the completion of the conversion.

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CHAPTER 13: NON-OBLIGATED ENTRY CAPACITY RELEASE AT INTERCONNECTION POINTS

~~250.~~243. In any of the processes identified in paragraph 189~~198~~ or through the IP PARCA process, National Grid may, at its sole discretion, release additional quantities of **Firm Interconnection Point Capacity** in excess of the prevailing ***Obligated Entry Capacity***. Such capacity is referred to as ***Non-obligated Entry Capacity.***

~~251.~~244. ***Non-obligated Entry Capacity*** may be released in advance of the entry capacity Interconnection Point auctions and/or via the IP PARCA process. National Grid will assess the risks and rewards associated with releasing the quantity of **Firm Interconnection Point Capacity** requested in order to determine the quantity to be released and allocated to Shipper Users.

Accelerated Release Incentive

~~252.~~245. The Licence (Special Condition 3B Part K) establishes an incentive mechanism which encourages National Grid to make ***Incremental Obligated Entry Capacity*** available to Shipper Users in advance of the default lead time in certain circumstances, known as 'accelerated release'. For Licence purposes this capacity is classified as ***Non-obligated Entry Capacity*** but is still **Firm NTS Entry Capacity** for Shipper User purposes.

~~253.~~246. As stated in paragraph 8, it is important that Shipper Users (or Reservation Parties) discuss potential new projects and increased requirements at existing IP ASEPs with National Grid at an early stage and, where possible, enter into an IP PARCA.

~~254.~~247. National Grid may release ***Non-obligated Entry Capacity*** at an Interconnection Point under the accelerated release incentive as shown in diagram 4 below. Such release will be subject to satisfaction of the following two criteria:

- IP PARCA capacity/price profiles satisfying the Economic Test referred to in paragraph 232~~241~~. For the avoidance of doubt Accelerated Release does not count towards the economic test.
- Satisfactory assessment by National Grid of the associated risks and rewards.

~~255.~~248. Having undertaken a risk /reward assessment National Grid may release **Incremental NTS Entry Capacity** as ***Non-obligated Entry Capacity*** under the accelerated release incentive, by placing it in an Annual Yearly auction provided that National Grid has indicated that it may, (consistent with UNC EID Section B 4.3.3), This may allow the IP PARCA applicant (or indeed any Shipper User) to obtain capacity earlier than the IP PARCA lead time.

~~256.~~249. If NG offers ***Non-obligated Entry Capacity*** into an Annual Yearly auction then it is under no obligation to release it in any subsequent auctions

~~CHAPTER 14: INTERCONNECTION POINT CAPACITY PRICING METHODOLOGY~~

~~257. The objective of the Interconnection Point Entry Capacity pricing methodology is to produce the reserve price, large prices steps and small price steps.~~

~~258. The reserve prices for IP ASEPs are produced in the NTS Transportation Model in accordance with the Gas Transmission Transportation Charging Methodology (UNC TPD Section Y Part A1). The large and small price steps will be calculated in accordance with UNC EID Section B.~~

~~259. The NTS Transportation Model is used to calculate Long Run Marginal Costs (LRMCs) and comprises:~~

- ~~**The Transport Model** that calculates the LRMCs of transporting gas from each entry point (for the purposes of setting **Entry Capacity** prices) to a "reference node" and from the "reference node" to each relevant offtake point.~~
- ~~**The Tariff Model** that adjusts the LRMCs to maintain an equal split of revenue between Entry and Exit Users (where entry prices are used to set auction reserve prices).~~

~~These models are described in more detail in the Gas Transmission Transportation Charging Methodology (UNC TPD Section Y Part A1).~~

~~260. Prices for each Gas Year are calculated using the relevant year's 1-in-20 peak supply and demand data and network model (e.g. if setting entry capacity prices for Gas Year 2018/19, the 2018/19 supply/demand forecast and network model are used).~~

~~261. The Reserve price, large price steps and small price steps for each IP ASEP are determined in accordance with the Gas Transmission Transportation Charging Methodology (UNC TPD Section Y Part A1 and UNC EID Section B).~~

Appendix 1: ~~Example of the NPV test~~Estimated Project Cost methodology

Non-IP's Only

The Estimated Project Cost Model

Model Input Data

(a) The model calculates the marginal costs of investment required in the National Transmission System as a consequence of an increase in demand for gas or supply of gas at each System Point or node on the National Transmission System. Such calculation is based upon analysis of peak conditions on the National Transmission System and the costs of investment which are expressed in £/GWhkm. Where there is an increase in demand for gas or supply of gas at a System Point, the marginal changes in flow distances (measured in GWhkm) for a small energy injection to the System (measured in GWh) shall be estimated initially by reference to the increases or decreases in units of kilometres of the National Transmission System.

(b) The model requires a set of inputs which are consistent with the costs incurred by National Grid NTS in making NTS Exit (Flat) Capacity available on the National Transmission System:

(i) Nodal supply and demand data (GWh)

(A) Demand data shall be derived in relation to each System Exit Point as the lesser of:

(1) the National Grid NTS forecast undiversified 1-in-20 peak day demand at the relevant NTS Exit Point, provided that:

(aa) for any NTS Connected Offtake System which is a Storage Facility or a pipeline interconnector and which has a physical Entry capability, demand at the relevant NTS Connected System Exit Point (CSEP) shall be deemed to be zero;

(bb) for NTS/LDZ Offtakes, the National Grid NTS forecast undiversified 1-in-20 peak day demand in the relevant LDZ shall be prorated between the relevant NTS/LDZ Offtakes on the basis of the amount of NTS Exit (Flat) Capacity registered at each of the relevant NTS/LDZ Offtakes;

For the purposes of this paragraph, "National Grid NTS forecast undiversified 1-in-20 peak day demand" means the 1-in-20 peak day demand for the National Transmission System that is derived from the summation of the forecast peak demands and load duration curves for each NTS Supply Point, NTS CSEP and NTS/LDZ Offtake; and

(2) the aggregate of the Baseline NTS Exit (Flat) Capacity and incremental NTS Exit (Flat) Capacity in respect of the relevant NTS Exit Point,

provided that paragraph (2) above shall be ignored for the purposes of setting or determining any indicative NTS Exit (Flat) Capacity Charges;

(B) Aggregate System Entry Point supplies

(ii) Transmission pipelines between each node (measured in km) and calculated by reference to;

(1) Existing pipelines

(2) New pipelines expected to be operational on or before the start of the Gas Year under analysis

(iii) Identification of a reference node.

Model Inputs

(c) The nodal supply data for the model shall be derived from the supply/demand data set out in the most recent Gas Ten Year Statement for each Gas Year for which prices are being determined. The aggregate supply flow shall be adjusted to ensure that the values for supply and demand are equal. This adjustment shall be carried out by reducing supplies in the following order to the point at which supplies equal the forecast demand:

(i) short range Storage Facilities, embedded generation, biomass;

(ii) mid range Storage Facilities;

(iii) LNG Importation Facilities;

(iv) long range Storage Facilities;

(v) pipeline interconnectors; and

(vi) beach terminals.

The supply figures for Individual System Entry Points at Storage Facilities and/or pipeline interconnectors may be set at a level that is less than or equal to the expected Entry Point capability.

(d) Nodal demand data for the model shall be derived from a range of different data sources as more particularly described in paragraph (b)(i).

(e) National Transmission System network data for the charging year will be based on data taken from National Grid NTS's most recent Gas Ten Year Statement.

Model Outputs

The model is an optimisation model that calculates the minimum total network flow distance (in GWhkm) given a set of supply and demand flows i.e. it takes the inputs described above and uses a transport algorithm to derive the pattern of balanced network flows that minimises distances travelled by these flows from a supply node or to a demand node, assuming every network section has sufficient capacity.

The marginal cost values are expressed solely in km as they are flow gradients i.e. they represent the sensitivity of the total network flow distance value to a change in supply or demand at any node.

Sum of flow times distance (GWh x km) divided by Change in Nodal flow (GWh) equals marginal cost (km)

The model computes a marginal cost for supply at each node (which may be positive or negative in relation to the reference node). The marginal cost for demand at each node is then the equal and opposite of the nodal marginal cost for supply. A negative marginal cost represents a marginal benefit or avoided cost at that point.

The Initial Nodal Marginal Distances

The marginal costs of supply and the marginal costs of demand are then used to set the Initial Nodal Marginal Distances (InitialNMkm):

$$InitialNMkm_{Si} = LRMC_{Si} \text{ and } InitialNMkm_{Dj} = -LRMC_{Dj}$$

Field Code Changed

Field Code Changed

Where

$InitialNMkm_{Si}$ = *Initial nodal marginal distance for supply i (km)*

$InitialNMkm_{Dj}$ = *Initial nodal marginal distance for demand j (km)*

$LRMC_{Si}$ = *Long run marginal cost of flow to reference node from supply i (km)*

$LRMC_{Dji}$ = *Long run marginal cost of flow to reference node from demand j (km)*

The marginal distances are converted into unit costs (£/GWh) by multiplying by the expansion constant (see below). For Entry prices, an adjustment to reflect the calorific value at the ASEP is also applied.

The Expansion Constant

The expansion constant, expressed in £/GWhkm, represents the capital cost of the transmission infrastructure investment required to transport 1 GWh over 1 km. Its magnitude is derived from the projected cost of an 85bar pipeline and compression for a 100km NTS network section. The 100km distance was selected as this represents the typical compressor spacing on the NTS.

Calculated from first principles, the steps taken to derive the expansion constant are as follows:

a) National Grid determines the projected £/GWhkm cost of expansion of 85bar gauge pressure pipelines and compression facilities, based on manufacturers' budgetary prices and historical costs inflated to present values.

b) An average expansion constant is calculated from the largest three pipeline diameter/compressor sections D_1, D_2, D_3 (network sections *n = 1, 2, and 3*). The selection of expansion constants calculated from these three network sections is based on recent and expected future projects on the transmission system. The pipe diameters used are: D_1 = 900 mm D_2 = 1050 mm D_3 = 1200 mm

c) The maximum daily flow that can be facilitated through each of the three network sections is calculated. This is based on assumptions of an 85bar_g inlet pressure and a minimum outlet pressure of 38bar_g and is calculated from the Panhandle A pipe flow equation (a standard flow equation used

within the gas industry).

$$Q_n = K_{flow} \times \left(\frac{T_{std}}{P_{std}}\right) \times D_n^{2.6182} \times \left(\frac{P_1^2 - P_{2,n}^2}{G^{0.8538} \times T_{av} \times L \times Z_{av}}\right)^{0.5394}$$

Field Code Changed

Where

Q_n = Flow for network section n (mscmd)

K_{flow} = Constant (0.0045965)

T_{std} = Standard temperature (291.4°K)

P_{std} = Standard pressure (1.01325 bar_a)

D_n = Diameter for network section n (mm)

P_1 = Pipe absolute inlet pressure (86.01325 bar_a = 85 bar_g)

$P_{2,n}$ = Pipe absolute outlet pressure for network section n (bar_a greater than or = 38 bar_a)

G = Gas specific gravity (0.6)

T_{av} = Pipeline average temperature (285.4°K)

L = Pipe length (100 km)

Z_{av} = Average gas compressibility (0.85)

d) The maximum daily energy flow is calculated from the volumetric flow using a standard planning CV of 39 MJ/m3 and the planning flow margin of 5%.

$$Capacity_n = \frac{Q_n \times CV}{((1+FM) \times 3.6)}$$

Field Code Changed

Where

$Capacity_n$ = Daily capacity for network section n (GWh)

Q_n = Flow for network section n (mscmd)

CV = Calorific Value (39 MJ/m^3)

FM = Flow margin (5%)

3.6 = Converts 10^6 MJ to GWh

e) The compressor power requirement to recompress back to 85 bar_g is calculated from the flow and the inlet and outlet pressures. The inlet pressure for the compressor is the outlet pressure of the pipe section for each pipe diameter D.

$$Power_n = \left(\frac{\gamma}{\gamma - 1}\right) \frac{K_{power} \times Z_{av} \times T_{av} \times Q_n}{\eta} \left[\left(\frac{P_{out}}{P_{in,n}}\right)^{\frac{\gamma-1}{\gamma}} - 1\right](1 + FM)$$

Field Code Changed

Where

$Power_n$ = Compressor power for network section n (MW)

$P_{in,n}$ = Compressor absolute inlet pressure for network section n(bar_a)

P_{out} = Compressor absolute outlet pressure (86.10325 bar_a)

K_{power} = Constant (0.0040639)

Z_{av} = Compressibility (0.85)

T_{av} = Average gas temperature (285.4°K)

Q_n = Flow for network section n (mscmd)

γ = Isentropic index (1.363)

Field Code Changed

η = Compressor adiabatic efficiency (80%)

FM = Flow margin (5%)

f) The capital cost of the pipe for each network section is calculated from the pipe cost equation, the pipe diameter and the pipe length of 100km.

$Pipe\_Cost_n = L \times (D_n \times Pipecost\_diameter\_factor + Pipecost\_constant\_factor)$

Where

$Pipe\_Cost_n$ = Capital cost for pipe in network section n (£m)

L = Length (100 km)

D_n = Diameter for network section n (mm)

Pipecost_diameter_factor = Capital cost factor (£m/km/mm)

Pipecost_constant_factor = Capital cost factor (£m/km)

g) The capital cost of recompression from the minimum pressure up to 85bar_g is calculated from the compressor power requirements

$$Compressor\_Cost_n = Power_n \times Power\_Unit\_Cost$$

Where

$Compressor\_Cost_n$ = Capital cost for compression in network section n (£m)

$Power_n$ = Compression power for network section n (MW)

Power_Unit_Cost = Unit cost for additional power at existing stations (£m/MW)

h) An allowance for engineering and project planning costs is included at 15%.

$$Project\_Cost_n = Project\_Factor * (Pipe\_Cost_n + Compressor\_Cost_n)$$

Where

$Project\_Cost_n$ = Project costs for network section n (£m)

Project_Factor = 15%

$Pipe\_Cost_n$ = Capital cost for pipe in network section n (£m)

$Compressor\_Cost_n$ = Capital cost for compression in network section n (£m)

i) The total cost is the pipe cost plus the compressor cost plus the project costs (£)

$$Total\_Cost_n = Pipe\_Cost_n + Compressor\_Cost_n + Project\_Cost_n$$

Where

$Total\_Cost_n$ = Total cost for network section n (£m)

$Pipe\_Cost_n$ = Capital cost for pipe in network section n (£m)

$Compressor\_Cost_n$ = Capital cost for compression in network section n (£m)

j) The unit cost is the total cost divided by the maximum energy flow (£m/GWh)

$$Unit\_Cost_n = Total\_Cost_n / Capacity_n$$

Where

$Unit\_Cost_n$ = Total unit cost for network section n (£m/GWh)

$Total\_Cost_n$ = Total cost for network section n (£m)

$Capacity_n$ = Daily capacity for network section n (GWh)

k) The expansion constant is calculated by dividing the unit cost by the pipe section length of 100km (£/GWhkm).

$$Specific\_Expansion\_Constant_n = 10^6 \times Unit\_Cost_n / L$$

Where

$Specific\_Expansion\_Constant_n$ = Expansion constant for network section n (£/GWhkm)

L = Length (100 km)

10^6 = Conversion factor from £m to £

$Unit\_Cost_n$ = Total unit cost for network section n (£/GWh)

l) The final expansion constant is a simple average of the individual pipeline expansion constants

$$EC = \frac{\sum_{n=1}^{3} Specific\_Expansion\_Constant_n}{3}$$

Field Code Changed

Where

EC = Expansion constant (£/GWhkm)

$Specific\_Expansion\_Constant_n$ = Expansion constant for network section n (£/GWhkm)

Supply/Demand Scenario

Estimated Project Costs for each Gas Year are set on the basis of the relevant Gas Year's base case supply and 1-in-20 peak demand data and network model, but with adjustments to the supply flows to reflect the capacity level in question Demand flows remain unadjusted.

To determine the Estimated Project Costs at the Obligated Entry Capacity level offered at an Entry Point, the supply scenario is adjusted for each Entry Point as follows:

- The supply flow is adjusted to the capacity level to be provided for the Entry Point in question.

- All other supply flows are adjusted up or down in order of merit to balance the network back to the peak 1 in 20 demand level in the base case data.

Supply Merit Order

The supply merit order for each System Entry Point reflects the least beneficial alternate supply flow, in terms of enabling capacity provision at that Entry Point.

The supply merit order is determined by use of the model with the base case scenario to calculate pipeline distances from each System Entry Point to every other Entry Point.

For System Entry Points where flow needs to be added to the base case flow to align with the required capacity level, the remaining Entry Point flows are reduced in order of pipeline distance merit, starting with the furthest Entry Point ending with the Entry Point with the nearest Entry Point.

For System Entry Points where flow needs to be reduced from the base case flow to align with the required capacity level, the remaining Entry Point flows are increased in order of pipeline distance merit, starting with the nearest Entry Point and ending with the furthest Entry Point.

Network Model

The appropriate network model for each period of capacity allocation is used i.e. the network model that includes sanctioned projects expected to be completed by the start of the Gas Year that is being modelled. All adopted connections that are fully depreciated are included at zero length.

There is a step to adjust the Initial Nodal Marginal Distances (InitialNMkm) such that the negative marginal distances are removed by collaring the Initial Nodal Marginal Distances at zero.

Long run incremental costs are calculated for an ASEP by determining the difference between adjusted nodal marginal distances for the relevant incremental capacity level and the Obligated Capacity level.

The differences in the adjusted marginal distances are converted into unit (incremental) costs (£/GWh) by multiplying it by the Expansion Constant. An adjustment to reflect the calorific value at the ASEP is also applied.

Incremental Distances

The Nodal Marginal Distances for each Entry Point being considered at each incremental capacity level are converted to Nodal Incremental Distances by calculating the difference between the Nodal Marginal Distance at the incremental level and the Nodal Marginal Distance at the Obligated Capacity level.

$$NIkm_{x,EntryPoint} = NMkm_{x,EntryPoint} - NMkm_{ObligatedEntryPoint}$$

Where

$NIkm_{x,EntryPoint}$ = Nodal incremental distance for the entry point for incremental capacity level x (km)

$NMkm_{x,EntryPoint}$ = Nodal marginal distance for the entry point for incremental capacity level x (km)

$NMkm_{Obligated,EntryPoint}$ = Nodal marginal distance for the entry point at the obligated capacity level (km)

EntryPoint = The entry point being analysed (a node in the set of supplies)

Estimated Project Values

For the purposes of determining the required commitment from bidders that would normally trigger the release of incremental capacityan estimated project value is calculated for the incremental capacity level as follows:

$$ProjectValue_{x,EntryPoint} = \frac{\left(NMkm_{obligated} + NIkm_{x,EntryPoint}\right) \times EC}{10^6} \times \frac{39}{CV_{entry}} \times IncCapacity_{x,EntryPoint}$$

Field Code Changed

Where

$ProjectValue_{x,EntryPoint}$ = Estimated project value for the entry point for the incremental level (£m)

$InitialPrice_{x,EntryPoint}$ = Initial Entry Price for the entry point for the incremental level x (p/kWh/day)

$NIkm_{x,EntryPoint}$ = Nodal incremental distance for the entry point for incremental level x (km)

$NMkm_{Obligated}$ = Nodal marginal distance for the entry point at the obligated level (km)

EC = Expansion Constant (£/GWhkm)

$IncCapacity_{x,EntryPoint}$ = Incremental capacity level x for the entry point (GWh)

EntryPoint = The entry point being analysed (a node in the set of supplies)

~~This example is provided as an indication of how the methodology to release ***Incremental Obligated Entry Capacity*** is applied. It should not be taken as being indicative of actual step prices, project values, or the ease with which release of capacity may be triggered.~~

~~Assume:~~

1. ~~for simplicity there are only 5 price steps~~
2. ~~the Unsold NTS Entry Capacity volume is 100GWh/d~~
3. ~~Q1 is October 2018~~

~~National Grid publishes the following Price Schedule to apply in a QSEC auction.~~

~~Available (GWh)~~	~~Price Label~~	~~Price (p/kWh/d)~~	~~Estimated project Value (£m)~~
~~150~~	~~P_5~~	~~0.06~~	~~20~~
~~140~~	~~P_4~~	~~0.05~~	~~16~~
~~130~~	~~P_3~~	~~0.04~~	~~12~~
~~120~~	~~P_2~~	~~0.03~~	~~8~~
~~110~~	~~P_1~~	~~0.02~~	~~4~~
~~100~~	~~P_0~~	~~0.01~~	~~0~~

~~Assume the following demand is signalled via bids placed in the auction:~~

Supply			Demand																
Available (GWh)	Price Label	Price (p/kWh/day)	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16	…	Q32
150	P_5	0.06	*100*	*100*	*120*	*120*	*110*	*100*	*100*	*100*	*100*	*100*	*100*	*100*	*100*	*100*	*100*	*100*	…	*100*
140	P_4	0.05	*100*	*100*	*120*	*120*	*110*	*100*	*100*	*100*	*100*	*100*	*120*	*100*	*100*	*100*	*100*	*100*	…	*100*
130	P_3	0.04	*100*	*100*	*130*	*130*	*120*	*100*	*130*	*130*	*100*	*100*	*130*	*125*	*100*	*100*	*110*	*110*	…	*100*
120	P_2	0.03	*100*	*100*	*135*	*135*	*120*	*100*	*135*	*131*	*110*	*100*	*132*	*125*	*100*	*100*	*120*	*120*	…	*100*
110	P_1	0.02	*100*	*100*	*140*	*135*	*130*	*100*	*140*	*140*	*120*	*100*	*134*	*125*	*100*	*100*	*120*	*120*	…	*100*
100	P_0	0.01	*100*	*100*	*145*	*140*	*131*	*100*	*140*	*140*	*120*	*100*	*135*	*130*	*100*	*100*	*120*	*120*	…	*100*

~~Q3 is the first quarter where aggregate capacity bids are placed at the relevant step price. Therefore, there is a signal to release 130GWh per day from Q3. Although 145 GWh per day was bid this was not at the relevant step price. The clearing price for Q3 and Q4 would be P_3, P_1 for Q5, P_3 for Q7 and Q8 and so on. This means that there is a signal for 30GWh per day of ***Incremental Obligated Entry Capacity***. The NPV test is applied as below:~~

~~It is possible that there could be second signal (not shown in the example) for release of a greater incremental quantity from a later quarter. National Grid will apply the NPV test against both signals, and if successful, will release ***Incremental Obligated Entry Capacity*** consistent with both sets of bids.~~

			Oct-18	Jan-19	Apr-19	Jul-19	Oct-19	Jan-20	Apr-20	Jul-20	Oct-20	Jan-21	Apr-21	Jul-21	Oct-21	Jan-22	Apr-22	Jul-22		Jul-26
			Q1	**Q2**	**Q3**	**Q4**	**Q5**	**Q6**	**Q7**	**Q8**	**Q9**	**Q10**	**Q11**	**Q12**	**Q13**	**Q14**	**Q15**	**Q16**		**Q32**
Incremental Capacity to release	**GWh**	**(a)**	0	0	30	30	30	0	30	30	20	0	30	30	0	0	20	20		0
Clearing Price	**p/kWh/d**	**(b)**	0.01	0.01	0.04	0.04	0.02	0.01	0.04	0.04	0.01	0.01	0.04	0.01	0.01	0.01	0.01	0.01		0.01
Days per quarter	**day**	**(c)**	92	90	91	92	92	91	91	92	92	90	91	92	92	90	91	92		92
Incremetnal Revenue	**£m**	**(a)*(b)*(c) 100**	0.00	0.00	1.09	1.10	0.55	0.00	1.09	1.10	0.18	0.00	1.09	0.28	0.00	0.00	0.18	0.18		0.00
NPV Test	**£m**	**50% Project Value**	6																	
NPV of Revenue	**£m**	**2.01%**	6.0																	

~~As the NPV of the revenues (£6.0m) = 50% * Project Value (£12m), the NPV test is passed and 30GWh/d would be released from Q3 as ***Incremental Obligated Entry Capacity***.~~

~~If the NPV of the revenues had been lower, i.e. < 50% * Project Value, the NPV test would fail and no capacity would be released as ***Incremental Obligated Entry Capacity***. However, National Grid may consider releasing ***Non-obligated Entry Capacity***. Quantities bid for that might be considered for release would be up to, 45 GWh/d for Q3, and/or 40 GWh/d for Q4, and/or 31 GWh/d for Q5 etc.~~

APPENDIX 2: PARCA SUPPORTING INFORMATION

PARCA Phases Overview:

PARCA Phase	Activities	Approximate Timescales	Activities and Outputs
0	Pre-PARCA Signature discussions		Bi-lateral discussions between National Grid and a customer before a PARCA has been agreed. *This is not technically a PARCA Phase however it has been included for completeness*
1	PARCA Application Window & ad-hoc QSEC Auction (if required) Network Capability Assessment & Investment Options Identified	Up to 6 months	The PARCA Application Window would be opened and National Grid would undertake an Ad-hoc QSEC Auction if a PARCA Application requesting NTS Entry Capacity has been accepted. We would undertake network analysis to determine how the requested level of capacity could be provided to the PARCA Applicant / Applicants given our existing capacity obligations and forecast future supply and demand patterns. We would make best use of existing system capability and / or NTS Capacity substitution, before considering investing in increased system capability. If network investment is required, we would determine the different available investment options. The outputs of the PARCA Phase 1 process would be issued to the PARCA Applicant in order that they can confirm whether they wish to proceed to PARCA Phase 2.
2	Capacity Reserved & Planning Submission Activities undertaken	Up to 60 months	Upon confirmation from the PARCA Applicant that they wish to proceed to PARCA Phase 2, the level of NTS Capacity identified in the PARCA Phase 1 outputs would be reserved at the appropriate NTS Exit and/or Entry Points for the PARCA Applicant. National Grid would undertake the appropriate works, if required, and will progress investment design works and an appropriate planning application. PARCA Phase 2 would apply up to receipt of planning approval. If no planning works are required to provide the NTS Capacity to the PARCA Applicant, it will be reserved until their respective capacity allocation date as identified in the PARCA Phase 1 outputs.
3	Capacity Allocation & Construction Activities	Up to 24 months	Following the completion of PARCA Phase 2 activities and upon confirmation from the PARCA Applicant, the reserved NTS Capacity will be allocated and construction activities (if required) would begin. If a contractual or commercial solution can be agreed as an alternative to construction then it would also be finalised and agreed during PARCA Phase 3. Upon allocation of any reserved NTS Capacity, UNC User Commitment applies.

PARCA Scenarios:
National Grid has produced a set of slides which describe examples of interacting projects which were presented at Transmission Workgroup. Please select the following link to access these slides:
https://www.gasgovernance.co.uk/index.php/tx/310113~~http://www2.nationalgrid.com/WorkArea/DownloadAsset.aspx?id=12195~~

APPENDIX 3: DEFINITIONS

DIA Fee (Demand Indication Application Fee) equivalent to the PARCA Application Fee (also known as the Phase 1 PARCA Fee) detailed in UNC EID E 6.

Incremental Capacity Signal means, in respect of Entry Capacity, a bid for Quarterly NTS Entry Capacity that satisfies the Net Present Value test as described in National Grid's Entry Capacity Release Methodology Statement

IP PARCA means Interconnection point **Planning and Advanced Reservation of Capacity Agreement** and is a bilateral agreement which allows non-code parties (Reservation Parties) or Users (Reservation Users) to reserve Interconnection Point capacity ahead of its registration to the User or, as the case maybe, a Nominated User (nominated by the Reservation Party).

PARCA means **Planning and Advanced Reservation of Capacity Agreement** and is a bilateral agreement which allows non-code parties (Reservation Parties) or Users (Reservation Users) to reserve Quarterly NTS Entry Capacity and / or Enduring Annual NTS Exit (Flat) Capacity ahead of its registration to the User or, as the case maybe, a Nominated User (nominated by the Reservation Party).

The **PARCA (IP PARCA) Applicant** is a person who has entered into a PARCA (IP PARCA) with National Grid NTS and can be either a non-code party (Reservation Party) or a User (Reservation User).

The **PARCA Application** is an application form, published by National Grid NTS which must be completed and submitted to National Grid NTS by the PARCA Applicant in order to request that National Grid NTS enters into a PARCA.

PARCA minimum duration quantity is the minimum number of quarters that capacity shall be requested for under a PARCA.

Phase 1 PARCA Fee means the sum to be paid by the User or Reservation Party to ensure funding of the Phase 1 PARCA Works. National Grid will not commence the Phase 1 PARCA Works until the fee is paid.

Phase 1 PARCA Works are those works deemed necessary by National Grid NTS to process the PARCA Application and to produce and issue the Phase 1 PARCA Works Report.

Phase 1 PARCA Works Report means the report to be submitted by National Grid to the User or Reservation Party following completion of the Phase 1 PARCA Works.

Phase 2 PARCA Works has the meaning given to the same term in the generic PARCA.

registered capacity is as defined in UNC TPD Section B.

Reservation Party means a party other than a User who is developing a project that will require the input of gas onto the NTS at a new or existing ASEP.

Revenue Drivers enable National Grid's allowed revenue to increase where it has accepted additional capacity obligations. They fund the activities that National Grid is required to undertake to support the delivery of any Funded Incremental Obligated Entry Capacity (and Legacy Incremental Entry Capacity) required to satisfy demand for Quarterly NTS Entry Capacity. Such activities may include planning and environmental assessments and submissions, materials and

construction works, or contractual alternatives to investment. Funding is released upon non-veto, by the Authority, of National Grid's proposals to release Funded Incremental Obligated Entry Capacity.

Works means works, in relation to reinforcement of the NTS, in order to make available Quarterly NTS Entry Capacity that requires the release of *Incremental Obligated Entry Capacity*. It includes (a) the provision of new or modified pipeline infrastructure to provide increased capability within the NTS, and/or (b) contractual alternatives to infrastructure that provide a more economic and efficient means of matching the capability of the NTS to User requirements. Consequently, Works will normally incur costs, which will require funding via provision of a Revenue Driver.

NTS Capacity Terminology Defined in the Licence:

Entry Capacity is capacity in the NTS which a Relevant Shipper User is treated as utilising in delivering gas to the NTS at an ASEP.

Firm Entry Capacity means Entry Capacity that provides users with a contractual right to flow onto the NTS and has the meaning given to that term in UNC.

Funded Incremental Obligated Entry Capacity means Incremental Obligated Entry Capacity for which the obligation to offer such capacity for sale commenced on or after 1 April 2013, which has not been provided through Entry Capacity Substitution and for which the Licensee has not received an additional funding allowance through Legacy Incremental Entry Capacity, the Funded Incremental Obligated Entry Capacity will be added to Licence Baseline Entry Capacity five years after the contractual delivery date.

Incremental Entry Capacity means Firm Entry Capacity other than Non-incremental Obligated Entry Capacity.

Incremental Obligated Entry Capacity means the volume of Firm Entry Capacity which the Licensee is required to offer for sale at an ASEP following implementation of a proposal made by the Licensee in accordance with Part A of Special Condition 5F (Determination of Incremental Obligated Entry Capacity volumes and the appropriate revenue drivers to apply) that is above the Non-incremental Obligated Entry Capacity which is derived in accordance with the obligations set out in Special Condition 9B (Methodology to determine the release of Entry Capacity and Entry Capacity Obligations volumes).

Legacy Incremental Entry Capacity means Incremental Obligated Entry Capacity for which the obligation to offer such capacity for sale commenced before 1 April 2013, for which the Licensee receives a revenue entitlement in accordance with Appendix 2 of Special Condition 3A (Restriction of NTS System Operation Revenue).

Legacy TO Entry Capacity means the volume of Entry Capacity that the Licensee must offer for sale as set out in Table 6 of Special Condition 5F (Determination of Incremental Obligated Entry Capacity volumes and the appropriate revenue drivers to apply).

Licence Baseline Entry Capacity means the volume of Entry Capacity that the Licensee must offer for sale as of 1 April 2013 as set out in ~~Table 4 of~~ Special Condition 5F (Determination of Incremental Obligated Entry Capacity volumes and the appropriate revenue drivers to apply).

Non-incremental Obligated Entry Capacity is the sum of Licence Baseline Entry Capacity and Legacy TO Entry Capacity adjusted for Entry Capacity Substitution.

Non-obligated Entry Capacity means Firm Entry Capacity other than Obligated Entry Capacity.

Obligated Entry Capacity is the sum of Non-incremental Obligated Entry Capacity, Funded Incremental Obligated Entry Capacity and Legacy Incremental Entry Capacity.

Interruptible Entry Capacity shall have the meaning given to the term “Daily Interruptible NTS Entry Capacity” in UNC.

NTS Capacity Terminology Defined in the UNC:

References to paragraphs in these definitions are to UNC TPD Section B and EID Section B.

Available NTS Entry Capacity for an Aggregate System Entry Point is, in respect of:

(a) a calendar month in Capacity Year Y and Capacity Year 1, not less than the sum of:
  (i) Unsold NTS Entry Capacity (if any); and
  (ii) Incremental NTS Entry Capacity (if any); and

(b) a calendar quarter in Capacity Year + 2 to Capacity Year + 16 (inclusive), is not less than the sum of:
  (i) Unsold NTS Entry Capacity (if any); and
  (ii) Incremental NTS Entry Capacity (if any).

Bundled Interconnection Point Capacity is Firm Interconnection Point Capacity that is made available in an Auction together with Equivalent Interconnected System Exit Capacity (with respect to an IP ASEP).

Daily Firm Interconnection Point Capacity is Firm Interconnection Point Capacity which may be bid for and registered as held (in a given amount) by a User for a single Gas Flow Day.

Daily Interruptible Interconnection Point Capacity is Interruptible Interconnection Point Capacity which may be bid for and registered as held (in a given amount) by a User for a single Gas Flow Day.

Daily Interruptible NTS Entry Capacity is Interruptible NTS Entry Capacity which may be applied for and registered as held (in a given amount) by a Shipper User for a particular Day only;

Daily NTS Entry Capacity is Firm NTS Entry Capacity which may be applied for and registered as held (in a given amount) by a Shipper User for a particular Day only;

Discretionary NTS Entry Capacity is NTS Entry Capacity which National Grid NTS shall be entitled to invite applications for by such means as National Grid NTS may determine in its sole discretion. The timing of any such invitation, the quantities of NTS Entry Capacity included in such invitation, and the terms which shall apply to the offering of, application for, allocation of and use of such Discretionary NTS Entry Capacity shall also be determined by National Grid NTS in its sole discretion;

Firm Interconnection Point Capacity is Interconnection Point Capacity that is not subject to curtailment.

Firm NTS Entry Capacity means Quarterly NTS Entry Capacity, Monthly NTS Entry Capacity and Daily NTS Entry Capacity which (without prejudice to UNC TPD Section I3.7) is not subject to curtailment;

Incremental NTS Entry Capacity is the amount of Firm NTS Entry Capacity (if any) in excess of the Unsold NTS Entry Capacity which National Grid NTS may (but shall not be required to) invite applications for pursuant to UNC TPD Section B 2.2 and 2.3;

Interconnection Point Capacity means System Capacity at an Interconnection Point, comprising NTS Entry Capacity (in relation to the IP ASEP).

Interruptible Interconnection Point Capacity is Interconnection Point Capacity which is liable to be curtailed in accordance with UNC TPD Section B2.9 and EID Section B10.6.

Interruptible NTS Entry Capacity means Daily Interruptible NTS Entry Capacity which is liable to be curtailed pursuant to UNC TPD Section B 2.9;

Monthly Interconnection Point Capacity is Interconnection Point Capacity which may be bid for and registered as held (in a given amount) by a User for each Day in a calendar month.

Monthly NTS Entry Capacity is Firm NTS Entry Capacity which may be applied for and registered as held (in a given amount) by a Shipper User for each Day in a particular calendar month;

NTS Entry Capacity at an Aggregate System Entry Point is capacity in the NTS which a Shipper User is treated as utilising in delivering gas to the NTS (and the Total System) at that point;

Quarterly Interconnection Point Capacity is Interconnection Point Capacity which may be bid for and registered as held (in a given amount) by a User for each Day in a calendar quarter.

Quarterly NTS Entry Capacity is Firm NTS Entry Capacity which may be applied for and registered as held (in a given amount) by a Shipper User for each Day in a particular calendar quarter;

Reserved Entry Capacity means capacity that is reserved in accordance with a PARCA or IP PARCA (and specified in the Phase 1 PARCA Works Report) with the intent that it shall later be allocated to and registered with a User.

Technical Interconnection Point Capacity is the amount of Firm Interconnection Point Capacity which National Grid NTS is required to make available to Users pursuant to the Licence as NTS Entry Capacity as set out in National Grid NTS's Transportation Statement.

Unbundled Interconnection Point Capacity is Firm or Interruptible Interconnection Point Capacity that is made available in an Auction separately from capacity rights provided by any Adjacent Transporter.

Unsold NTS Entry Capacity is the amount of Firm NTS Entry Capacity that National Grid NTS has, for the purposes of:

(i). UNC TPD Section B 2.2, in relation to each Day in a calendar quarter (in the case of QSEC) or in a month (in the case of AMSEC);
(ii). UNC TPD Section B 2.3, in relation to each Day in a calendar month;
(iii). UNC TPD Section B 2.4, in relation to a Day

an obligation to make available (in accordance with the procedures set out in UNC TPD Section B2) to Shipper Users pursuant to Special Condition 5F of National Grid NTS's Transporter's Licence as, in the case of NTS Entry Capacity to be made available under UNC TPD Section B 2.2, 2.3 and 2.4 but not 2.5, set out in National Grid NTS's Transportation Statement.

Unsold Technical Interconnection Point Capacity is Technical Interconnection Point Capacity which is not allocated to and held by Users.

Yearly Interconnection Point Capacity is Interconnection Point Capacity which may be bid for and registered as held (in a given amount) by a User for each Day in a Gas Year.