

Revision No. 4213

nationalgrid

Document Revision History

Version Number	Date of Issue	Notes on changes		
1.0	December 2010	Uniform Network Code (UNC) Modification 0322V implemented: Inclusion of 'The Gas Transmission Connection Charging Methodology' within the UNC.		
2.0	June 2012	a) Removed the Gas Transmission Connection Charging Methodology from this document as it duplicates that contained within UNC Section Y – Connection Charging. b) Gas Transmission Statement of Connection Charging revised as a consequence of UNC Modification Proposal 0373 'Governance of the NTS connection processes'		
3.0	October 2013	Gas Transmission Statement of Connection Charging Annual revision. Effective date of 1st October 2013 to align with Gas Charging Year.		
4.0	February 2015	Amendment to include the application fee associated to the Planning and Reservation of Capacity Agreements (PARCAs) in accordance with UNC Modification 0465V – 'Introduction of the Planning and Advanced Reservation of Capacity Agreement (PARCA), Weighted Average PARCA Security'		
5.0	March 2017	Amendments to include: a) Updated connection charging application fees, including the introduction of application fees associated with the disconnection and decommissioning of an existing connected site. b) Introduction of a new "Minor Modification" application category and a Customer re-application Assessment Mechanism, in accordance with UNC Modification 0373 'Governance of NTS Connection Processes'.		
6.0	March 2018	Amendment to include the proposed new category Project CLoCC (Customer Low Cost Connections) Customer Pilot. The proposed application fee will be £0.00.		
7.0	July 2018	Amendments to include: a) Updated connection charging application fees. b) Introduction of a revised "Minor Modification" application category and a "Ramp Rate Study" application category in accordance with UNC Modification 0373 'Governance of NTS Connection Process c) Inclusion of CAM Incremental Application Fee		

8.0	October 2018	Amendments to include: a) Updated connection charging application fees to include Standard Design fees and to introduce additional categories of PARCA fees. b) Remove Project CLoCC Customer Pilot fee
9.0	January 2019	Amended to: a) Reduce application fees for Simple and Medium FCOs. b) Apply simple application fees to Entry to allow a greenfield fee option c) Quantify specific charges for pre-connection study categories to allow transparency of these indicative fees with a pre- defined scope
10	January 2020	Annual review of charges. Amended to: a) Add PARCA Admin fee option b) Apply any updates as a result of Annual revision of all fees c) Add Annex B – Fees Diagram
11	January 2021	Annual review of charges. Amended to: a) Add PARCA variation fees b) Amend Minor Modification details to include gas quality modifications
12	March 2022	Updates to Indicative Connection Charges and Examples Formatting and consistency improvements Formatted: Font color: Text 2
<u>13</u>	[12023	Specific to Hydrogen Minor Modifications update Formatting and consistency changes. Formatted: Font color: Auto

Contents

Introduction	<u>4</u>
Section 1- Application Fees	<u>8</u>
Section 2 – Indicative Connection Charges And Examples	<u>18</u>
Annex A – Contact Information	<u>32</u>
Annex B – Connection Fees Diagram	<u>33</u>

Introduction

- 1.0 This document is published by National Grid in accordance with Standard Licence Condition 4B of our Gas Transporter Licence and in accordance with the Gas Transmission Connection charging methodology contained within the Uniform Network Code, Transportation Principal Document, Section Y, Section 2.
- 2.0 This document sets out the fees charged by National Grid in relation to:
 - Applications for connection to the National Transmission System (the "NTS") in Great Britain and some example costing information for connections to the NTS.
 - Applications for Planning and Advance Reservation of Capacity Agreements ("PARCAs).
 - Applications for disconnection and/or decommissioning of an existing connected system point to the NTS.
 - Applications for Capacity Allocation Mechanism ("CAM") Incremental Demand Assessments
- 3.0 This Statement applies to applications/requests made from the Effective Date of this statement and remains effective until superseded by any future Statement (approved by the Authority if required) and which will be published by National Grid Gas NTS ("National Grid").
- 4.0 This document is organised in the following sections:
 - a) Section 1 contains the fees associated with making an application for a connection or modification to a connection to the National Transmission System (the "NTS") in Great Britain and/or a PARCA and/or a CAM Incremental Demand Assessment application.
 - b) Section 2 contains indicative charges and connection charging examples.
- 5.0 This document is one of a suite of documents that describe the charges levied by National Grid and the methodologies behind them. The other documents that are available include:
 - Statement of Gas Transmission Transportation Charges
 - Entry Capacity Release Methodology Statement
 - Exit Capacity Release Methodology Statement
 - · Metering Charging Statement

These are available on our charging website at:

https://www.nationalgridgas.com/charging

and

https://www.nationalgridgas.com/capacity/capacity-methodology-statements

- 6.0 This statement is effective from 8th March 20222023, the "Effective Date".
- 7.0 Terms and expressions defined in the Uniform Network Code shall have the same meanings, interpretations or constructions in this document.

Specific to Planning and Advance Reservation of Capacity Agreements (PARCA) Applications:

- 8.0 This Statement applies to PARCA applications made from the Effective Date of this statement. A PARCA is a bilateral contract that allows a customer to reserve firm entry and/or exit capacity on the NTS. For further information on PARCAs visit https://www.nationalgridgas.com/connections/reserving-capacity-parca-and-cam
- 9.0 The PARCA allows non-code parties or 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 may be, a Nominated User (a User nominated by a non-code party). Note: DNO Users will be entitled to reserve Enduring Annual NTS Exit (Flat) Capacity only.
- 10.0 Should the PARCA Applicant proceed with the reservation following signature of their PARCA Contract, the methodology that National Grid Gas plc ("National Grid") in its role as holder of the Gas Transporter Licence in respect of the NTS (the "Licence") employs to calculate applicable security amounts and indicative and final capacity charges is contained in the Uniform Network Code Transportation Principal Document Section Y Charging Methodologies.

Specific to CAM Incremental:

- 11.0 In order to harmonise the development process for incremental capacity, rules for incremental capacity have been included in the network code EID on Capacity Allocation Mechanism (CAM NC).
- 12.0 The newly introduced process provides for several phases, including certain requirements that need to be fulfilled, before an incremental project can be initiated based on market demand and new capacity requirements.
- 13.0 A market demand assessment will be conducted in accordance with Article 26 of the Official Regulation (EU) 2017/459 of the amended CAM code and covers how the market will signal to TSOs a potential need for capacity beyond the unsold technical capacity available.
- 14.0 The project design covers technical studies and a TSO led public consultation on the proposed incremental project.
- 15.0 National Regulatory Authority (NRA) approval covers the finalisation of the project proposal followed by an NRA decision on whether the project goes ahead.
- 16.0 The allocation mechanism can be via the standard annual yearly auctions at interconnection points (IP's), or an alternative mechanism can be proposed under the project design.
- 17.0 National Grid intends to make use of the alternative mechanism to follow the existing Planning & Advanced Reservation of Capacity Agreement (PARCA) process as much as possible.
- 18.0 Any allocation or reservation of capacity will be subject to an economic test.
- 19.0 The CAM process does not cover rules for gaining planning consent or for construction, however. These remain a necessary part of the process for creating incremental capacity and are considered as part of the process rules where appropriate.

Specific to Connection Applications

- 20.0 This Statement applies to Connection Applications made from the effective date of this statement for:
 - new NTS connections:
 - modifications to existing NTS connection apparatus (including disconnection and/or decommissioning of an existing connection point/apparatus).

For more information on NTS connections visit

- If a customer requires National Grid to undertake a Pre-Connection Study to explore 21.0 several potential NTS connection sites for an onshore storage facility, it would be appropriate to submit a request for a Pre-Connection Study to the Gas Connections Portfolio Team rather than submit an Application for an Initial Connection Offer or Full Connection Offer (both of which require the customer to specify its desired NTS connection point).
- 22.0 The methodology that National Grid Gas plc ("National Grid") in its role as holder of the Gas Transporter Licence in respect of the NTS (the "Licence") employs to levy charges for connection to the National Transmission System (the "NTS") in Great Britain is contained in the Uniform Network Code - Transportation Principal Document Section Y - Charging Methodologies.
- 23.0 This Statement is complementary to National Grid's Entry Capacity Release (ECR) methodology statement, which details the criteria by which National Grid will release incremental NTS entry capacity.
- This Statement is also complementary to National Grid's Exit Capacity Release (ExCR) 24.0 methodology statement, which details the criteria by which National Grid will release NTS exit capacity.
- It should be noted that in addition to a physical connection to the NTS, the following 25.0 additional requirements also need to be satisfied before gas can flow through that connection as specified in the Uniform Network Code:
 - National Grid will require gas shipper(s) at the connection point (or DNs in the case of Exit capacity for NTS/LDZ Offtakes) to acquire the appropriate Entry and/or Exit capacity in accordance with the Network Code and the ECR and ExCR methodology statements:
 - b) National Grid will require a customer to enter into a Supply Point Network Exit Agreement (NExA), Connected System Exit Point (CSEP) NExA, NTS/LDZ Supplemental Agreement, Network Entry Agreement (NEA), Interconnector Agreement or Storage Connection Agreement (SCA), as appropriate.
- It should also be noted that system reinforcement may be triggered as a result of the release of Entry and Exit capacity and not as part of the connection process as follows:
 - a) For Entry capacity all necessary Reinforcement;
 - b) For Exit capacity only that Reinforcement that is needed upstream of the Connection Charging Point ("CCP").
- Further information relating to the connection process and the National Grid connection services and the ECR and ExCR methodology statements may be obtained from the National Grid web site, https://www.nationalgrid.com/uk/gas-transmission/, or by writing to the address given in Annex A.

Specific to Hydrogen

We anticipate we will begin to receive more Hydrogen related connection enquiries in the coming years. We are considering how best to manage these enquiries and any applications through our existing processes. In the meantime, although there is currently no specific charges set for Hydrogen applications this does not mean that we cannot discuss customer requirements and look to utilise existing processes where possible to enable an appropriate study. We envisage that there could be a future change to the charging statement relating to this.

Please contact us if you are considering a hydrogen connection, or modification to an existing connection to accommodate hydrogen, so that we can discuss the most appropriate approach to meet your needs.

Section 1- Application Fees

Summary of the PARCA Application Fee

- 28.0 A PARCA Application Fee is payable in respect of a Competent PARCA Application.
 - i) The Fee is determined depending upon the Capacity Indicator assigned to the PARCA Application in accordance with UNC (TPDB1.14.16). The Capacity Indicator reflects the activities required and time taken to produce the Phase 1 PARCA Works Report.
 - ii) The Top Up Fee will be payable if the Capacity Indicator changes, resulting in the required fee changing from Simple to Complex in accordance with UNC (B1.15.11).
 - iii) Where a PARCA application is for an existing site and only unsold capacity at that same existing site is required to meet the PARCA request, the Simple Admin fee can be applied. This is at National Grid's discretion if no network analysis is required. In this case, it is expected to be able to complete this within 1 month, although up to 4 months is allowed under UNC.
- 29.0 Typical National Grid Transmission activities required to produce a Phase 1 PARCA Works Report and PARCA include, but are not limited to, the administration of the application, desktop design activities, network analysis, costing activities, internal governance and legal review.
- 30.0 The PARCA Application Fee reflects the estimated average National Grid Transmission fully absorbed costs required to produce the Phase 1 PARCA Works Report and the PARCA itself.

Table 1.0 - PARCA Application Fees and Timescale

Output: PARCA contract: including Phase 1 PARCA Works Report

Capacity Indicator/Fee Type	Timescales to provide the PARCA and Phase 1 PARCA Works Report	PARCA Application Fee	
Simple – Admin Fee - Applicable to a Green Capacity Indicator where only unsold capacity is required at an existing site	Up to 4 months	£2,000	
Simple – Applicable to a Green or Amber Capacity Indicator	Up to 4 months	£53,000	
Complex – Applicable to a Red Capacity Indicator	Up to 6 months	£120,000	
Top Up – Applicable if Simple Fee is paid initially and this changes to a Complex Fee in accordance with UNC	Up to 6 months	£67,000	

31.0 The PARCA Application Fee will be subject to VAT

32.0 The Phase 1 PARCA Works Report will include:

- The Registration Date, which is the first day that the Reserved Capacity may be registered from. This may or may not be the same as the first date requested by the PARCA Applicant.
- The quantity of Quarterly NTS Entry Capacity and/or Enduring Annual NTS Exit (Flat) Capacity to be reserved and, if applicable, the capacity range that can be accommodated (which may, or may not, be capacity range requested by the PARCA Applicant).
- the profile of the Quarterly NTS Entry Capacity and/or Enduring Annual NTS Exit
 (Flat) Capacity to be reserved (where applicable) and, if applicable, the Reserved
 Capacity Tolerance (as defined under the PARCA) that can be accommodated
 (which may, or may not, be the capacity range requested by the PARCA Applicant
 under the Competent PARCA Application)."
- The allocation date, which is the date on which the Reserved Quarterly NTS Entry Capacity and/or Enduring Annual NTS Exit (Flat) Capacity will be registered by National Grid NTS to the Reservation User or, as the case may be, Nominated User(s).
- The indicative Quarterly NTS Entry Capacity and/or NTS Exit (Flat) Capacity charges applicable to the Reserved Capacity.
- The actual costs incurred by National Grid NTS in undertaking the Phase 1 PARCA Works and therefore the monies owed by or to be returned to the PARCA Applicant.
- The annual security requirements derived from the Total PARCA Security Amount that is required to further progress the PARCA.
- The PARCA Demonstration Information and PARCA Demonstration Date requirements.
- Whether there is a need for reinforcement works.
- For information purposes only, indicative ramp rates and pressures.
- Where the PARCA Applicant is a DNO User, the NTS Exit Flexibility Capacity quantity and Assured Offtake Pressure that National Grid NTS will provide at the DNO Offtake if the reserved capacity is allocated subject to the terms and conditions of the PARCA.

Reconciliation of PARCA Application Fee

32.1 The PARCA Application Fee will be reconciled in accordance with Section Y, Section 5 paragraph 45 of the Uniform Network Code.

PARCA Variation Application Fees

- 33.0 A PARCA Variation Application Fee is payable where a request is made to vary the Registration Date, Location and/or capacity quantity of a PARCA within Phase 2.
- 33.1 A request to vary a PARCA requires analysis. The range of analysis and therefore cost associated will depend on the request.
- 33.2 Typical National Grid Transmission activities required to vary a PARCA include but are not limited to: the administration of the request, network analysis, updating contractual documents and industry notices.
- 33.3 The PARCA Variation Application Fee reflects the estimated National Grid

Transmission fully absorbed costs to carry out the required activities for the type of request.

33.4 All fees will be reconciled back to actual cost, based on cost pass though, in accordance with UNC.

Table 1.0b - PARCA Variation Application Fees and Timescales

Capacity Indicator/Fee Type	Timescale	PARCA Variation Application Fee	
Simple – Variation Admin Fee for requests to vary Registration Date back to a later date only.	Up to 4 months*	£950	
Simple – Variation Fee for requests to vary registration date forward to an earlier date, and/or location and/or capacity quantity	Up to 4 months	£6,720	

^{*}likely to be within 1-2 months for this type but may depend upon when submitted.

Summary of CAM Incremental Application Fee

- 34.0 To ensure consistency with the PARCA process a Demand Indication Fee will be applied under the following principles:
 - A fee will be required to achieve competency and will be payable by each party submitting a demand indication.
 - The fee will replace the PARCA Application Fee but shall be equivalent in value to it.
 - The fee will be returned in full to the party if:
 - An incremental project is not initiated following publication of the demand assessment report;
 - The economic test for an incremental project is positive.
 - Conversely, the fee will be retained by National Grid if the economic test is negative.
 For the avoidance of doubt this includes where parties submit nil submissions into the economic test.
 - Where a fee is retained by National Grid then it will be reconciled against actual costs incurred, between the publication of the demand assessment report and the publication of the Joint Notice, by National Grid in progressing the incremental project.

Table 1.1 – CAM Incremental Application Fee

Output of Application	CAM Incremental Application Fee	
Demand Assessment Report, Incremental Project initiated and positive economic test.	£120,000	

Summary of NTS Connection Application Fees

- 35.0 A Connection Application Fee is payable in respect of:
 - An Initial Connection Application
 - A Full Connection Application for a New site or modification to an Existing site
 - An application for the Disconnection and/or Decommissioning of an existing connection point/apparatus
 - An application for a Minor Modification to existing NTS apparatus
 - An application requesting a modification/change to a previously signed Full Connection Offer.
 - An application requesting a change in flow rates (Ramp Rate Study) at an existing connection point
- 36.0 The Connection Application Fee for a Connection Offer will reflect the current average National Grid Transmission fully absorbed costs required to produce the information contained in a Connection Offer.
- 37.0 Typical National Grid Transmission activities required to produce a Connection Offer include, but are not limited to, the administration of the application, desktop design activities, network analysis, costing activities, internal governance and legal review. In addition, National Grid Transmission will acquire external analytical consultancy services, for example, to produce a conceptual design study.
- 38.0 The Connection Application Fee the customer is required to pay is based on the type of NTS Connection, the Offer Type and connection criteria. The timescales given are from the receipt of all information required by National Grid together with the Connection Application fee being cleared into the National Grid Transmission bank account.
- 39.0 All NTS Connection Application Fees are subject to VAT.

Pre- Application

Applicant Requested Pre-Connection Studies – option available ahead of Connection Application.

Pre-connection study requests can be made to explore potential connection options and this request will be considered and terms specific to the request agreed including the scope and fee.

Pre-connection studies for specific pre-defined scope areas are listed in the following table with an indication of the fee payable for that type of request. The actual fee will be agreed depending on the scope on a case-by-case basis. These are available to customers as an option before making a Connection Application.

Connection Criteria	Timescales to provide Assessment	Application for any category of new or existing NTS Connection		
		Entry	Exit	Storage
Suitability Assessment for Greenfield Connection – assessment of whether proposed location and land provision is consistent with requirements and timescales for connection.	To be agreed		~£5,000	
Guidance and assessment on whether a customer's proposed gas quality monitoring and processes for entry or storage are to National Grid satisfaction and if they can avoid the need for gas quality monitoring equipment on the NTS, appropriate only for low volumes on a case-by-case basis.	To be agreed		~£20,000	

NTS Connections - Application Fee and Timescales

Table 1.2 - Initial Connection Offer

Connection Criteria	Timescales to provide an Initial Connection Offer	Application for any category of new or existing NTS Connection		
		Entry	Exit	Storage
Simple				
Medium	Up to 2 months		£14,000	
Complex				

Table 1.3 – Full Connection Offers (various categories), Minor Modifications, Ramp Rate Study, Disconnections and Decommissioning

Category	Timescales to provide a Full	Type of Connection		+Ramp Rate Study Application Fee
	333331.	Exit	Entry & Storage	
Standard Design (Fixed fee)	Up to 3 months	£13,300	£13,300 #	
Standard Design Feasibility Study (additional fee)	Additional 3 months	£14,000	£14,000	
Simple (greenfield) Connection	Up to 6 months	£45,000*	£45,000* #	
Medium Connection	Up to 9 months	£75,000**	£75,000** #	£42,000
			£109,000**	242,000
Complex Connection	Up to 9 months	£406,000**	£406,000**	
Minor Modifications	Up to 6 months	£30,000*	£30,000*	
Disconnection	Up to 6 months	£70,000**	£70,000**	
Decommissioning	Up to 9 months	£153,000**	£153,000**	
* Feasibility Studies are not required for this category type				
** A Feasibility Study, Ramp Rate Study, transient analysis, or all three may be undertaken depending on the customer requirements for this category type. Where a Ramp Rate Study is required the Application Fee for a Ramp Rate Study will be added.				
# Where 20D gas quality monitoring is not required - Customers can potentially avoid the requirement to install NTS gas quality monitoring equipment 20 diameter lengths either side of the connection by providing				

[#] Where 20D gas quality monitoring is not required - Customers can potentially avoid the requirement to install NTS gas quality monitoring equipment 20 diameter lengths either side of the connection by providing their own monitoring equipment and process for ensuring non GSMR compliant gas does not enter the NTS to the satisfaction of National Grid, to be assessed on a case-by-case basis and appropriate for low volumes.

40.0 Should any combination be applied for (for example, Exit and Storage), the fee will be the higher of the individual fees.

41.0 A Modification to a Full Connection Offer Application Fee is payable in respect of a customer requiring a modification/change to a previously accepted Full Connection Offer only, and the fee will be based on one of the following criteria:

Table 1.4 - Modifications to a Full Connection Offer - Application Fee

Criteria	Value of Fee
An amount mutually agreed by the Connection Applicant and National Grid NTS (reconciled)	Agreed amount
In the absence of a mutually agreed amount	0.75 * Original FCO Fee

42.0 An application fee will be payable for re-application requests for lapsed full connection offers <12 months from the date that the FCO lapsed. National Grid will apply a % discount application fee, subject to meeting the assessment criteria, as Table 1.5.</p>

Table 1.5 - Re-assessment of Lapsed FCOs - Application Fee

Re- assessment Criteria	% Discount Application Fee
There is no impact of other National Grid projects or programmes	Minimum of 25% discount
No network changes since FCO lapsed	
No material changes to customer requirements	
Customer Programme dates are realistic	

Reconciliation of NTS Connection Application, Modification Application, Disconnection and Decommissioning Application Fees

- 43.0 Applications fees will be reconciled in accordance with Section V, paragraph 13.2 of the Uniform Network Code, and applies to the following applications categories:
 - NTS Connection Applications (Non-Standard Design)
 - Modification Applications
 - Disconnection Applications
 - · Decommissioning Applications
 - Minor Modifications Applications
 - Re-assessment Applications for Lapsed offers
 - Change in flow rate (Ramp Rate Study) Applications
 - Standard Design Feasibility Study
- 44.0 The Application Fees are fixed and not reconciled for the following application categories:
 - an Initial Connection Offer (ICO)
 - Standard Design Full Connection Offer

Connection Criteria

45.0 The level of the Connection Application Fee that will be paid by a customer is subject to qualification against connection criteria as shown below:

Table 1.6 – Standard Design Connections

Standard Design	Standard Design Feasibility Study (Additional fee if required)
<u>All</u> of the following are satisfied:	One or more of the following are satisfied:
The proposed NTS connection will have a flow rate of no greater than 229 kscmh/hr (57.3 gwh/d) based on a design pressure of 38barg. and;	the proposed connection meets the criteria of a Standard Design connection. and;
The proposed NTS connection can utilise the 80mm, 200mm or 300mm Standard Designs in accordance with the document "National Grid T/PM/G/19 – Management Procedure for Application of Model Design Appraisals or Entry and Exit Connections up to 300mm Minimum Offtake Connections	the proposed NTS connection will offtake gas at a ramp-rate of > 50 MW per minute
and;	and/or;
the proposed NTS connection will be located at an existing NTS Connection which can accommodate the Standard Design~	the proposed NTS connection will have a physical influence on the existing NTS compressor stations
and;	and/or;
National Grid is not required to construct the customer's pipeline connection from the NTS to the customer facility	the proposed NTS connection will have a physical influence on the existing NTS Multijunctions or Pig Traps.
and;	
National Grid has not undertaken any feasibility study which demonstrated that the Standard	and/or.
Study which definished that the Standard Design cannot be accommodated at the proposed connection location	the proposed NTS connection is into an existing NTS location site which requires further investigation

[~] All greenfield (undeveloped) sites are classed as "Simple" for the purposes of the application fee due to the requirement to assess the suitability of the proposed location. The customer will be offered the most economical solution to connect.

Note i) that a Standard Design Connection fee does not include the cost of a Standard Design Feasibility Study and if this is deemed to be required then the Standard Design Feasibility Study fee will be required to be paid in addition.

Note ii) that a Standard Design Connection fee does not include for National Grid to carry out any additional study or assessment in relation to Gas Quality monitoring process safety systems for Entry Points. This can be requested as a separate study.

Table 1.7 - Non - Standard Design Connections

Simple	Medium	Complex
All of the following are satisfied:	One or more of the following are satisfied:	In addition to meeting one or more of the connection criteria for 'Medium':
The proposed connection does not meet the Standard Design criteria	The proposed connection does not meet the Standard Design criteria	the The proposed connection will require significant changes in
and;	and	operational requirements to an existing National Grid above ground installation (AGI) and/or Metering Installation
the proposed NTS connection - will be located in a greenfield (undeveloped) site	the proposed connection is an NTS entry point (the requirement for 20D gas quality monitoring will determine the fee)	and/or;
and;	or;	the proposed connection will require extensive infrastructure changes to the NTS e.g. re-routing or re-siting
If Exit, the proposed NTS connection will offtake gas at a ramp-rate of <= 50 MW per minute	the proposed connection is a storage facility directly connected to the NTS (the requirement for 20D gas quality monitoring will determine the fee)	
and;	,	
the proposed NTS connection will not have a physical influence on existing NTS connection points	or; the proposed NTS connection will offtake gas at a ramp-rate of > 50 MW per minute	
and;		
the proposed NTS connection will not have a physical influence on existing NTS compressor stations	or; the proposed NTS connection will have a physical influence on the existing NTS connection points	
and;	'	
National Grid is not required to construct the customer's pipeline connection from the NTS to the customer facility	or; the proposed NTS connection will have a physical influence on the existing NTS compressor stations	
and;	or;	
If Entry, does not require 20D gas quality monitoring on the NTS as demonstrated by a GQ8	the proposed connection is at the extremity of the NTS	
assessment to the satisfaction of National Grid.	or;	
	National Grid is required to construct the customer's pipeline from the NTS to the customer facility	

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Ramp Rate Studies

Ramp Rate Study Only (changes in flow rates to existing NTS Apparatus)

A ramp rate increase over 50 MW per minute may trigger a ramp rate study (this may include a transient study where appropriate).

This category does not cover any physical removal or installation of assets.

This fee includes for the transient study if required. If not required, this will be returned in the reconciliation of fees.

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Minor Modifications

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<u>46.0</u> Modifications to existing NTS connections will follow the same criteria as for a new connection unless it is classed as a Minor Modification. Note that, in addition, a Minor Works process exists for customer requirements where operational resource is required only to facilitate customers work. https://www.nationalgridgas.com/data-and-operations/maintenance.

Minor Modifications

This category does not cover any physical removal or installation of assets owned by National Grid.

This category may include:

- National Grid analysis and validation of customer assets e.g., customer requested flow rate changes at sites where National Grid does not own the metering and regulation.
- Gas quality changes;
- Gas composition changes; and

Changes to existing NTS Apparatus that are covered by this category include:

- Change in Meter Settings; and
- Adjusting Regulator Settings.

This category requires a change to the relevant bilateral contract to reflect the changes made i.e., NExA/NEA/SCA

Disconnection and Decommissioning Category Definitions

4647.0 The category areas for disconnection and decommissioning services have been defined, and are detailed below:

Disconnection (physical)	Decommissioning (complete removal)
Positive Isolation of the customer's downstream facilities from the NTS and the Customers	Site returned to original state All National Grid owned assets disconnected and
Facilities.	removed from the site including the removal of
Physical airgap between the two assets.	any National Grid owned pipeline
Gas is unable to flow.	
National Grid maintain assets owned by them at the site.	
Site moves into a "mothballed" state.	
Asset Preservation (Mothballing)	Asset Preservation (Mothballing)
Following disconnection of the assets National Grid will conduct ongoing asset maintenance to ensure the assets are safe and preserved such	May be required if the National Grid owned assets are disconnected and the customer's timeline for decommissioning is significantly later.
that they can be returned to service in the event the customer wishes to bring the site back 'on stream'.	National Grid will conduct ongoing Asset maintenance to ensure the assets are safe until the decommissioning is fully completed.
As this is a customer driven request costs for the on-going maintenance of the mothballed assets will be agreed with the customer	As this is a customer driven request costs for maintenance will be agreed with the customer.

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Section 2 – Indicative Connection Charges and Examples

Indicative charges for connection works are outlined in the table below. As stated previously, the customer will be required to pay National Grid Transmission for the actual costs incurred for Construction Works by undertaking the agreed works.

Indicative Connection Charges:

Construction Works for a new minimum offtake connection ("MOC") at a National Grid greenfield site	~ £1,500,000 to £2,000,000 (non- standard Design*)
Construction Works for a connection at an existing National Grid site	This is wholly dependent on the complexity of the site. Feasibility and conceptual design studies will provide an estimate of the potential cost.
Construction Works for System Extension pipeline (Exit only)	Approx. £2,000,000 per km in good soil and even topography with 48-inch diameter pipeline. The charges will vary according to pipeline diameter and will increase for difficult ground conditions and/or terrain. Additional charges might also arise as a result of the planning obligations introduced by the Planning Act 2008.
*Note for a Standard Design connection the Construction works are expected to cost less	

Remotely Operable Valves (ROVs) are mentioned specifically within this Section 2. There may be circumstances in which no ROV is deemed to be required (subject to a risk assessment conducted by National Grid and at the sole discretion of National Grid). Where and when this proves to be the case this could result in a cost saving, since the ROV requires associated Electrical and Instrumentation kiosk, telemetry, a power supply, an Asymmetric Digital Subscriber Line (ADSL) back-up to very small aperture terminal (VSAT) communications and site extensions to accommodate the equipment. Savings are estimated at up to circa £250,000. In addition, it is envisaged that another potential benefit is a reduction in cyber-risk.

If, subject to National Grid's discretion, a Remotely Operable Valve (ROV) is not required and, therefore, no Remote Telemetry Unit (RTU) is necessary, then the footprint of the land required for the National Grid connection assets could be reduced.

National Grid are now able to offer a 4G telemetry solution, in place of an RTU, if there is service availability for this in the connection location.

Example 1: Pre-Connection Study - Several potential sites to be considered for a new onshore storage facility and associated NTS connection points

A customer requires National Grid to undertake a Pre-Connection Study to explore several potential NTS connection sites for an onshore storage facility. The customer has narrowed the site for the new onshore storage facility to two locations.

Notes:

In this example, National Grid would advise the customer that due to the nature of the customer requirements, it would be appropriate to submit a request for a Pre-Connection Study; rather than submit an Application for an Initial Connection Offer or Full Connection Offer (both of which require the customer to specify its desired NTS connection point).

There are no pre-determined fees/costs for a Pre-Connection Study as it is a bespoke study and the scope will dependent on the customer's requirements.

All costs incurred by National Grid in producing the Pre-Connection Study, including, where contracted, the costs of third-party design consultancy services, will be paid by the customer on a cost pass-through basis.

Should the customer wish to progress its project further, it would be required to submit a Connection Application to National Grid for either an Initial Connection Offer or a Full Connection Offer.

Example 2: Initial Connection Offer - New offshore storage facility connection to an existing entry facility

A customer requires an early quotation (including layout, price, program of works) to connect a new offshore storage facility in close proximity to an existing beach entry facility.

Indicative Costs (at the time of publication):

Application Fee for an Initial Connection Offer (Connection Criteria is Complex)	£14,000 (full and final)
Construction Works	Not applicable
Total Cost	£14,000

Notes:

In this example the customer requires an early indication of the potential layout, costs and program of works for use in its initial project assessment.

The customer will submit an Application for an Initial Connection Offer to National Grid. National Grid will provide the customer with an Initial Connection Offer within 2 months of the application being deemed competent (as defined within UNC Section V).

An Initial Connection Offer is non-binding and incapable of acceptance by the customer and National Grid and is provided for guidance purposes only.

Should the customer wish to progress its project further, it would be required to submit a Connection Application to National Grid for a Full Connection Offer.

Example 3a: Full Connection Offer - Minimum Offtake Connection for a Power Station

A customer requires an NTS minimum offtake connection (MOC) for its CCGT power station; the customer will build the system extension from the power station to the MOC. The customer has indicated that it requires an offtake ramp-rate of less than 50 MWh per minute.

National Grid will build the connection apparatus connecting to the NTS in a greenfield site. <u>Indicative Costs</u> (at the time of publication):

One ROV Installation

Application Fee for a Full Connection Offer (Connection Criteria is Simple)	£45,000 (reconciled against FCO outturn costs)
Construction Works	£1,700,000
Total Estimate	£1,773,000

Notes:

In this example the customer would provide metering instrumentation to National Grid's technical specification.

All costs shown include applicable overheads and are estimated costs and are provided for guidance purposes only.

The fee is paid by the customer at the time it submits its Connection Application. The Application Fee will be reconciled against the outturn costs incurred by National Grid in providing the Full Connection Offer. The customer will either pay, or be refunded, the cost differential 3 months after the offer is accepted, rejected (or lapses).

The example is for indicative purposes only and may be affected by specified requirements or complexity associated with specific projects. Actual costs will be charged to the customer.

The charges shown in this section do not include gas flow and energy measurement equipment, as National Grid does not offer new transmission connection metering installations.

Additional charges may arise in respect of the System Extension as a result of the planning obligations introduced by the Planning Act 2008.

Example 3b: Full Connection Offer - Minimum Offtake Connection for a Biomethane Entry Point at an existing NTS site

A customer requires an NTS minimum offtake connection (MOC) for its Biomethane Plant. The customer will build the connecting pipeline from the customer site to the MOC. The customer has indicated that it requires an offtake ramp-rate of less than 50 MWh per minute.

National Grid will build the connection apparatus connecting to the NTS at an existing NTS Block Valve site.

Indicative Costs (at the time of publication):

One ROV Installation

Application Fee for a Full Connection Offer (Connection Criteria is Standard Design)	£13, 000 - <u>300</u> (Fixed cost)
Construction Works	£610,000
Total Estimate	£623,000

Notes:

In this example the customer would provide metering instrumentation to National Grid's technical specification.

All costs shown include applicable overheads and are estimated costs and are provided for guidance purposes only.

The Application fee is paid by the customer at the time they submit their Connection Application. The Application Fee is fixed and will not be reconciled against the outturn costs incurred by National Grid.

The example is for indicative purposes only and may be affected by specified requirements or complexity associated with specific projects. Actual costs for Construction works will be charged to the customer

The charges shown in this section do not include gas flow and energy measurement equipment, as National Grid does not offer new transmission connection metering installations.

The charges shown in this example do not include for any Gas Quality monitoring equipment on the NTS. This is provided by the customer.

Charges shown in this example do not include VAT, but will be applicable.

If a Feasibility Study was required for a Standard Design customer, then an additional fee would be required to be paid.

This example does not include a System Extension or Connecting pipeline to the customer site.

Example 4: Full Connection Offer - Connection for a CCGT Power Station with system extension

A customer's CCGT power station is located approximately 20 km from the nearest NTS pipeline across an area with good ground conditions and level terrain. National Grid will build the connection apparatus connecting to the NTS in a greenfield site and the System Extension pipeline from the NTS connection to the power station site.

Indicative Costs (at the time of publication):

Connection apparatus (for the avoidance of doubt this does not include any System Extension and Reinforcement):

Two ROV Installations (one at each end of the System Extension)

No Ramp Rate Study required

Application Fee for a Full Connection Offer (Connection Criteria is Complex)	£406,000 (reconciled against FCO outturn costs)
Construction Works (covering two sites)	£1,800,000 - £2,000,000
Subtotal	£2,406,000 - £2,406,000

System Extension and Reinforcement works downstream of the Connection Charging Point:

Construction Works	£40,000,000
Total Estimate	£42,406,000 - £42,406,000

Notes:

In this example the customer would provide metering instrumentation to National Grid's technical specification.

The fee is paid by the customer at the time it submits its Connection Application. The Application Fee will be reconciled against the outturn costs incurred by National Grid in providing the Full Connection Offer. The customer will either pay, or being paid, the cost differential 3 months after the offer is accepted, rejected (or lapses).

The example is for indicative purposes only and may be affected by specified requirements or complexity associated with specific projects. Actual Costs will be charged to the customer.

The charges shown in this section do not include gas flow and energy measurement equipment, as National Grid does not offer new transmission connection metering installations.

Additional charges may arise in respect of the System Extension as a result of the planning obligations introduced by the Planning Act 2008.

For a System Extension, an ROV Installation will be needed at each end of the System Extension to allow for isolation of the pipeline. The indicative cost includes this.

Example 5: Full Connection Offer - Connection for a System Entry Facility - Onshore Storage

A customer is developing a new onshore storage facility – National Grid will provide the connection apparatus connecting to the NTS at a greenfield site.

Indicative Costs (at the time of publication):

Connection apparatus: ROV Installation

Application Fee for a Full Connection Offer (Connection Criteria is Simple)	£45,000 (reconciled against FCO outturn costs)
Construction Works (covering two sites)	£xxx - £xxx
Total Estimate	£xxx - £xxx

Notes:

In this example the customer would provide the metering and Gas Quality Instrumentation to National Grid's technical specification and has demonstrated how their gas quality monitoring equipment will avoid the need for NTS gas quality monitoring downstream of the connection to the satisfaction of National Grid.

The customer would not be asked for a capital contribution towards any System Extension pipeline between the NTS and the ROV, or Reinforcement as these would be provided subject to the rules of the IECR methodology statement.

All costs shown include applicable overheads and are Estimated Costs and are provided for guidance purposes only.

The Fee is paid by the customer at the time it submits its Connection Application. The Application Fee will be reconciled against the outturn costs incurred by National Grid in providing the Full Connection Offer. The customer will either pay, or being paid, the cost differential 3 months after the offer is accepted, rejected (or lapses).

This example is for indicative purposes only and may be affected by specified requirements or complexity associated with specific projects. Actual Costs will be charged to the customer.

The charges shown in this section do not include gas flow and energy measurement equipment, as National Grid does not offer new transmission connection metering installations.

Example 6: Full Connection Offer - Connection at an existing National Grid Site

A customer requires a new entry connection at existing beach terminal.

Indicative Costs (at the time of publication):

Connection apparatus: To be determined during study work.

Application Fee for a Full Connection Offer (Connection Criteria is Complex)	£406,000 (reconciled against FCO outturn costs)
Construction Works	Determined by the feasibility and conceptual design studies
Total Estimate	£TBD

Notes:

In this example the customer would provide the Gas Quality Instrumentation to National Grid's technical specification.

The customer would not be asked for a capital contribution towards a System Extension pipeline (for entry purposes) between the NTS and the ROV, or Reinforcement as these would be provided subject to the rules of the IECR methodology statement.

All costs shown include applicable overheads and are Estimated Costs.

The Fee is paid by the customer at the time it submits its Connection Application. The Application Fee will be reconciled against the outturn costs incurred by National Grid in providing the Full Connection Offer. The customer will either pay, or being paid, the cost differential 3 months after the offer is accepted, rejected (or lapses).

The example is for indicative purposes only and may be affected by specified requirements or complexity associated with specific projects. Actual Costs will be charged to the customer.

The charges shown in this section do not include gas flow and energy measurement equipment, as National Grid does not offer new transmission connection metering installations.

Example 7: Full Connection Offer - Modification to an existing Exit Connection with National Grid metering installed

A customer requires a modification to an existing power station connection e.g. Amendment of pressure, flow rate, gas temperature, ramp rates etc. where National Grid owns both the ROV Installation and the Metering Installation.

Indicative Cost (at the time of publication):

Application Fee for a Full Connection Offer (Connection Criteria is Medium)	£117,000 (£75,000 + £42,000) (reconciled against FCO outturn costs)
Construction Works	Determined by the feasibility and conceptual design studies
Total Estimate	£TBD

Notes:

All costs shown include applicable overheads and are Estimated Costs.

The Fee is paid by the customer at the time it submits its Connection Application. The Application Fee will be reconciled against the outturn costs incurred by National Grid in providing the Full Connection Offer. The customer will either pay, or being paid, the cost differential 3 months after the offer is accepted, rejected (or lapses).

The example is for indicative purposes only and may be affected by specified requirements or complexity associated with specific projects. Actual Costs will be charged to the customer.

The charges shown in this section do not include gas flow and energy measurement equipment, as National Grid does not offer new transmission connection metering installations.

Example 8: Full Connection Offer - Modification to an existing Exit Connection with customer owned metering

A customer requires a modification e.g. amendment of ramp rates to an existing Industrial Consumer where National Grid owns the ROV installation but the Metering Installation is owned by a 3rd party.

Indicative Costs (at the time of publication):

Application Fee for a Full Connection Offer (Connection Criteria is Medium)	£42,000 (reconciled against FCO outturn costs)
Works	Determined by the Ramp Rate Study
Total Estimate	£TBD

Notes:

The scope of works above will only consider the impacts to the National Grid owned connection assets. The customer will be responsible for ensuring that the customer owned Metering assets are fit for purpose following the connection modification.

All costs shown include applicable overheads, are Estimated Costs and are provided for guidance purposes only.

The Fee is paid by the customer at the time it submits its Connection Application. The Application Fee will be reconciled against the outturn costs incurred by National Grid in providing the Full Connection Offer. The customer will either pay, or being paid, the cost differential 3 months after the offer is accepted, rejected (or lapses).

The example may be affected by specified requirements or complexity associated with specific projects. Actual Costs will be charged to the customer.

Example 9: Full Connection Offer - Minor Modification to an existing NTS apparatus

A customer requires a minor modification e.g. change of meter settings or adjustment of regulator settings or a gas quality modification.

Indicative Costs (at the time of publication):

Application Fee for a Full Connection Offer (Connection Criteria is Medium)	£30,000 (reconciled against FCO outturn costs)
Works	Determined by the minor modification study
Total Estimate	£TBD

Notes:

The scope of works above will only consider the impacts to the National Grid owned connection assets. The customer will be responsible for ensuring that the customer owned assets are fit for purpose following the minor modification.

All costs shown include applicable overheads, are Estimated Costs and are provided for guidance purposes only.

For gas quality modifications network analysis will likely be required which is estimated to cost in the range of £9,500 to £14,000 as a guide.

The Fee is paid by the customer at the time it submits its Connection Application. The Application Fee will be reconciled against the outturn costs incurred by National Grid in providing the Full Connection Offer. The customer will either pay, or being paid, the cost differential 3 months after the offer is accepted, rejected (or lapses).

The example may be affected by specified requirements or complexity associated with specific projects. Actual Costs will be charged to the customer.

Example 10: Full Connection Offer - Disconnection Application

A customer requires a physical disconnection of existing NTS apparatus from the customer's facilities, resulting in a positive isolation, whereby there will be a physical airgap between the two assets and gas will be unable to flow, the National Grid owned assets are not physically removed off site.

Asset Preservation - following disconnection of the assets National Grid will conduct ongoing asset maintenance to ensure the assets are safe and preserved, costs for ongoing maintenance must be agreed with the customer in advance of the work commencing.

Indicative Costs (at the time of publication):

Application Fee for a Full Connection Offer (Disconnection Criteria)	£70,000 (reconciled against FCO outturn costs)
Works	Determined by the feasibility study
Total Estimate	£TBD

Notes:

The scope of works above will only consider the impacts to the National Grid owned connection assets. The customer will be responsible for ensuring that the customer owned assets are safe following the disconnection.

All costs shown include applicable overheads, are Estimated Costs and are provided for guidance purposes only.

The Fee is paid by the customer at the time it submits its Application. The Application Fee will be reconciled against the outturn costs incurred by National Grid in providing the Full Connection Offer. The customer will either pay, or being paid, the cost differential 3 months after the offer is accepted, rejected (or lapses).

The example may be affected by specified requirements or complexity associated with specific projects. Actual Costs will be charged to the customer.

Example 11: Full Connection Offer - Decommissioning Application

A customer requires a physical disconnection of existing NTS apparatus from the customer's facilities, resulting in a positive isolation, whereby there will be a physical airgap between the two assets and gas will be unable to flow. Following completion of the disconnection all assets owned by National Grid including pipeline will be removed off site and the area of the site previously taken up by the above assets will be returned to its original state.

A period of Asset Preservation may be required following disconnection of the assets, in the event the customer's timeline to decommission the site is significantly later than the date of the initial disconnection. In the event of an Asset Preservation period, National Grid will conduct ongoing asset maintenance to ensure the asset is safe, costs for ongoing maintenance will be agreed with the customer prior to such Asset Preservation period.

Indicative Costs (at the time of publication):

Application Fee for a Full Connection Offer (Decommissioning Criteria)	£153,000 (reconciled against FCO outturn costs)
Works	Determined by the feasibility study
Total Estimate	£TBD

Notes:

The scope of works above will only consider the impacts to the National Grid owned connection assets. The customer will be responsible for ensuring that the customer owned assets are safe following the disconnection.

All costs shown include applicable overheads, are Estimated Costs and are provided for guidance purposes only.

The Fee is paid by the customer at the time it submits its Application. The Application Fee will be reconciled against the outturn costs incurred by National Grid in providing the Full Connection Offer. The customer will either pay, or being paid, the cost differential 3 months after the offer is accepted, rejected (or lapses).

The example may be affected by specified requirements or complexity associated with specific projects. Actual Costs will be charged to the customer.

Example 12: PARCA Application Fees.

A customer requires to reserve capacity at a new NTS Exit point ahead of completing a new NTS connection.

The indicative Capacity Indicator received from National Grid is Amber. The customer would therefore be applicable to pay the Simple PARCA fee initially. This fee may later change if, following Validation, the Capacity Indicator was Red. In this case, the Top Up fee would have to be paid. If the Capacity Indicator was assigned Green then no Top Up fee would be payable.

Indicative Costs (at the time of publication):

Application Fee for a Simple PARCA	£53,000 (reconciled against outturn costs)
Top up Fee if required.	£67,000
Total Estimate	£53,000 to £120,000

Notes:

Charges shown in these examples are indicative and do not include VAT, which may be applicable

PARCA fees are reconciled against Actual costs.

If a PARCA agreement was signed, then the customer would be required to provide the required security ahead of the reservation of the capacity.

Security is based on the applicable weighted average annual capacity charge. Examples of Security required can be provided on request to PARCA applicants and depend upon the quantity of capacity reserved and the applicable prevailing weighted average price.

The Total Security amount is required to be put in place each year is as follows.

Year 1 25%

Year 2 50%

Year 3 75%

Year 4 100%

If a PARCA agreement is terminated, a termination amount is payable based on the number of days the capacity was reserved for ahead of termination.

Annex A - Contact Information

Address for specific connection enquiries

Any enquiries relating to specific connection projects should be sent by email to box.UKT.customerlifecycle@nationalgrid.com

or to the address given below.

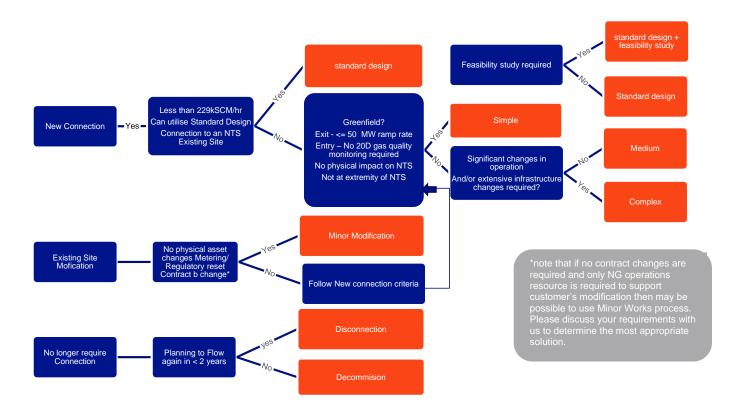
Gas Contract Portfolio Manager

<u>Customer & Stakeholder, Commercial, Gas Transmission</u>Future Networks

Gas System Operator

National Grid
National Grid House
Warwick Technology Park
Gallows Hill
Warwick
CV34 6DA

Annex B – Connection Fees Diagram. This is for Guidance – Please check Connection Criteria and discuss with National Grid.



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