Appendix 10 Glossary

Acronym	Term	Definition
	Annual power demand	The electrical power demand in any one fiscal year. Different definitions of annual demand are used for different purposes.
ACS	Average cold spell	Average cold spell: defined as a particular combination of weather elements which gives rise to a level of winter peak demand which has a 50% chance of being exceeded as a result of weather variation alone. There are different definitions of ACS peak demand for different purposes.
AGI	Above-Ground Installation	To support the safe and efficient operation of the pipeline, above ground installations (AGIs) are needed at the start and end of the cross-country pipeline and at intervals along the route.
ANOP	Anticipated Normal Operating Pressure	A pressure that we may make available at an offtake to a large consumer connected to the NTS under normal operating conditions. ANOPs are specified within the NExA agreement for the site.
AOP	Assured Offtake Pressure	A minimum pressure at an offtake from the NTS to a DN that is required to support the downstream network. AOPs are agreed and revised through the annual OCS process.
AQ	Annual Quantity	The AQ of a Supply Point is its annual consumption over a 365-day year.
ARCA	Advanced Reservation of Capacity Agreement	This was an agreement between National Grid and a shipper relating to future NTS pipeline capacity for large sites in order that shippers can reserve NTS Exit Capacity in the long term. This has been replaced by the PARCA process. (See also PARCA)
ASEP	Aggregate System Entry Point	A System Entry point where there is more than one, or adjacent Connected Delivery Facilities; the term is often used to refer to gas supply terminals.
	Bar	The unit of pressure that is approximately equal to atmospheric pressure (0.987 standard atmospheres). Where bar is suffixed with the letter g, such as in barg or mbarg, the pressure being referred to is gauge pressure, i.e. relative to atmospheric pressure. One millibar (mbarg) equals 0.001 bar.
BAT	Best Available Technique	A term used in relation to Industrial Emissions Directive (IED) 2010. In this context BAT is defined as Best Available Technique and means applying the most effective methods of operation for providing the basis for emission limit values and other permit conditions designed to prevent and, where that is not practicable, to reduce emissions and the impact on the environment as a whole.
BBL	Balgzand - Bacton Line	A gas pipeline between Balgzand in the Netherlands and Bacton in the UK. http://www.bblcompany.com. This pipeline is currently uni-directional and flows from the Netherlands to the UK only.
	Baseload electricity price	The costs of electricity purchased to meet minimum demand at a constant rate.
bcm	billion cubic metres	Unit or measurement of volume, used in the gas industry. 1 bcm = 1,000,000,000 cubic metres
	Biomethane	Biomethane is a naturally occurring gas that is produced from organic material and has similar characteristics to natural gas. http://www.biomethane.org.uk/
	Boil-off	A small amount of gas which continually boils off from LNG storage tanks. This helps to keep the tanks cold.
BREF	BAT Reference Documents	BAT Reference Documents draw conclusions on what the BAT is for each sector to comply with the requirements of IED. The BAT conclusions drawn as a result of the BREF documents will then form the reference for setting permit conditions.
	Capacity	Capacity holdings give NTS Users the right to bring gas onto or take gas off the NTS (up to levels of capacity held) on any day of the gas year. Capacity rights can be procured in the long term or through shorter term processes, up to the gas day itself.
CCGT	Combined Cycle Gas Turbine	Gas turbine that uses the combustion of natural gas or diesel to drive a gas turbine generator to generate electricity. The residual heat from this process is used to produce steam in a heat recovery boiler which in turn, drives a steam turbine generator to generate more electricity. (See also OCGT)

Acronym	Term	Definition
CCS	Carbon Capture and Storage	Carbon (CO2) capture and storage (CCS) is a process by which the CO2 produced in the combustion of fossil fuels is captured, transported to a storage location and isolated from the atmosphere. Capture of CO2 can be applied to large emission sources like power plants used for electricity generation and industrial processes. The CO2 is then compressed and transported for long-term storage in geological formations or for use in industrial processes.
CEN	Comité Europeén de Normalisation	European committee for standardisation concerned with the development, maintenance and distribution of standards and specifications.
CfD	Contract for Difference	Contract between the Low Carbon Contracts Company (LCCC) and a low carbon electricity generator designed to reduce its exposure to volatile wholesale prices.
CHP	Combined heat and power	A system whereby both heat and electricity are generated simultaneously as part of one process. Covers a range of technologies that achieve this.
CLNG	Constrained LNG	A service available at some LNG storage facilities whereby Shippers agree to hold a minimum inventory in the facility and flow under certain demand conditions at National Grid request. In exchange Shippers receive a transportation credit from National Grid.
CM	Capacity Market	The Capacity Market is designed to ensure security of electricity supply. This is achieved by providing a payment for reliable sources of capacity, alongside their electricity revenues, ensuring they deliver energy when needed.
CNG	Compressed natural gas	Compressed natural gas is made by compressing natural gas to less than 1 percent of the volume it occupies at standard atmospheric pressure.
CO2	Carbon Dioxide	Carbon dioxide (CO2) is the main greenhouse gas and the vast majority of CO2 emissions come from the burning of fossil fuels (coal, natural gas and oil).
CO2e	Carbon Dioxide equivalent	A term used relating to climate change that accounts for the "basket" of greenhouse gasses and their relative effect on climate change compared to carbon dioxide. For example UK emissions are roughly 600m tonnes CO2e. This constitutes roughly 450m tonnes CO2 and less than the 150m tonnes remaining of more potent greenhouse gasses such as methane; which has 21 times more effect as a greenhouse gas, hence its contribution to CO2e will be 21 times its mass.
	Compressor Station	An installation that uses gas turbine or electricity driven compressors to boost pressures in the pipeline system. Used to increase transmission capacity and move gas through the network.
CSEP	Connected System Exit Point	A point at which natural gas is supplied from the NTS to a connected system containing more than one supply point. For example a connection to a pipeline system operated by another Gas Transporter.
CV	Calorific Value	The ratio of energy to volume measured in megajoules per cubic metre (MJ/m3), which for a gas is measured and expressed under standard conditions of temperature and pressure.
CWV	Composite Weather Variable	A measure of weather incorporating the effects of both temperature and wind speed. We have adopted the new industry wide CWV equations that take effect on 1 October 2015.
DC	Directly Connected (offtake)	Direct connection to the NTS typically to power stations and large industrial users. I.e. the connection is not via supply provided from a Distribution Network.
DCO	Development Consent Order	A statutory Order under The Planning Act (2008) which provides consent for a development project. Significant new pipelines require a DCO to be obtained, and the construction of new compressor stations may also require DCOs if a new HV electricity connection is required.
DECC	Department of Energy and Climate Change	A UK government department: The Department of Energy & Climate Change (DECC) works to make sure the UK has secure, clean, affordable energy supplies and promote international action to mitigate climate change.
DFN	Daily Flow Notification	A communication between a Delivery Facility Operator (DFO) and National Grid, indicating hourly and end of day entry flows from that facility.
DFO	Delivery Facility Operator	The operator of a reception terminal or storage facility, who processes and meters gas deliveries from offshore pipelines or storage facilities before transferring the gas to the NTS.

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Acronym	Term	Definition
	Distribution System	A network of mains operating at three pressure tiers:
	Diurnal Storage	Gas stored for the purpose of meeting, among other things, within day variations in demand. Gas can be stored in special installations, such as in the form of linepack within transmission, i.e. >7 barg, pipeline systems.
DM	Daily Metered Supply Point	A Supply Point fitted with equipment, for example a datalogger, which enables meter readings to be taken on a daily basis.
DN	Distribution Network	A gas transportation system that delivers gas to industrial, commercial and domestic consumers within a defined geographical boundary. There are currently eight DNs, each consisting of one or more Local Distribution Zones (LDZs). DNs typically operate at lower pressures than the NTS.
DNO	Distribution Network Operator	Distribution Network Operators own and operate the Distribution Networks that are supplied by the NTS.
EIA	Environmental Impact Assessment	Environmental study of proposed development works as required under EU regulation and the Town and Country Planning (Environmental Impact Assessment) Regulations 2011. These regulations apply the EU directive "on the assessment of the effects of certain public and private projects on the environment" (usually referred to as the Environmental Impact Assessment Directive) to the planning system in England.
ELV	Emission Limit Value	Pollution from larger industrial installations is regulated under the Pollution Prevention and Control regime. This implements the EU Directive on Integrated Pollution Prevention and Control (IPPC) (2008/1/EC). Each installation subject to IPPC is required to have a permit containing emission limit values and other conditions based on the application of Best Available Techniques (BAT) and set to minimise emissions of pollutants likely to be emitted in significant quantities to air, water or land. Permit conditions also have to address energy efficiency, waste minimisation, prevention of accidental emissions and site restoration.
EMR	Electricity Market Reform	A government policy to incentivise investment in secure, low-carbon electricity, improve the security of Great Britain's electricity supply, and improve affordability for consumers. The Energy Act 2013 introduced a number of mechanisms. In particular: ■ A Capacity Market, which will help ensure security of electricity supply at the least cost to the consumer. ■ Contracts for Difference, which will provide long-term revenue stabilisation for new low carbon initiatives. Both will be administered by delivery partners of the Department of Energy and Climate Change (DECC). This includes National Grid Electricity Transmission (NGET).
ENA	Energy Networks Association	The Energy Networks Association is an industry association funded by gas or transmission and distribution licence holders.
ENTSOG	European Network of Transmission System Operators for Gas	Organisation to facilitate cooperation between national gas transmission system operators (TSOs) across Europe to ensure the development of a pan-European transmission system in line with European Union energy goals.
ETYS	Electricity Ten Year Statement	The ETYS illustrates the potential future development of the National Electricity Transmission System (NETS) over a ten year (minimum) period and is published on an annual basis.
	Exit Zone	A geographical area (within an LDZ) that consists of a group of supply points that, on a peak day, receive gas from the same NTS offtake.
FEED	Front End Engineering Design	The FEED is basic engineering which comes after the Conceptual design or Feasibility study. The FEED design focuses on the technical requirements as well as an approximate budget investment cost for the project.
FES	Future Energy Scenarios	The FES is a range of credible futures which has been developed in conjunction with the energy industry. They are a set of scenarios covering the period from now to 2050, and are used to frame discussions and perform stress tests. They form the starting point for all transmission network and investment planning, and are used to identify future operability challenges and potential solutions.
	Gas Deficit Warning	The purpose of a Gas Deficit Warning is to alert the industry to a requirement to provide a within day market response to a physical supply / demand imbalance.
	Gasholder	A vessel used to store gas for the purposes of providing diurnal storage.

Acronym	Term	Definition
	Gas Supply Year	A twelve-month period commencing 1 October, also referred to as a Gas Year.
	Gone Green	A National Grid scenario defined in the Future Energy Scenarios (FES) document whereby the 2020 renewables target is met.
GB	Great Britain	A geographical, social and economic grouping of countries that contains England, Scotland and Wales.
GSOF	Gas System Operability Framework	To address future system operability challenges on the gas network, such as System Flexibility, National Grid gas are considering the possibility of introducing a Gas System Operability Framework (GSOF). This will highlight how current and future operability challenges are identified. The SOF is a concept used by National Grid electricity transmission and was first published in 2014. It draws on real-time experience on the electricity system, combined with FES, to infer potential challenges to operability of the electricity transmission system out to 2035. The electricity SOF identifies and quantifies future system challenges so that a range of mitigation measures can be developed and economically assessed.
GS(M)R	Gas Safety (Management) Regulations 1996	Regulations which apply to the conveyance of natural gas (methane) through pipes to domestic and other consumers and cover four main areas: (a) the safe management of gas flow through a network, particularly those parts supplying domestic consumers, and a duty to minimise the risk of a gas supply emergency; (b) arrangements for dealing with supply emergencies; (c) arrangements for dealing with reported gas escapes and gas incidents; (d) gas composition. Gas Transporters are required to submit a safety case to the HSE detailing the arrangements in place to ensure compliance with GS(M)R requirements.
	Gas Transporter	Formerly Public Gas Transporter (PGT), GTs, such as National Grid, are licensed by the Gas and Electricity Markets Authority (GEMA) to transport gas to consumers.
GTYS	Gas Ten Year Statement	The Gas Ten Year Statement is published annually in accordance with National Grid Gas plc's obligations in Special Condition 7A of the Gas Transporters Licence relating to the National Transmission System and to comply with Uniform Network Code (UNC) requirements
GW	Gigawatt	1,000,000,000 watts, a measure of power.
GWh	Gigawatt hour	1,000,000,000 watt hours, a unit of energy.
gCO2/kWh	Gram of carbon dioxide per kilowatt hour	Measurement of CO2 equivalent emissions per kWh of energy used or produced.
HSE	Health and Safety Executive	The HSE regulates the onshore pipeline operators to maintain and improve the health and safety performance within the industry.
IEA	International Energy Agency	An intergovernmental organisation that acts as energy policy advisor to 28 member countries.
IED	Industrial Emissions Directive	The Industrial Emissions Directive came into force on 6th January 2011. IED recasts seven existing Directives related to industrial emissions into a single clear, coherent legislative instrument. The recast includes IPPC, LCP, the Waste Incineration Directive, the Solvents Emissions Directive and three Directives on Titanium Dioxide.
IGMS	Integrated Gas Management Control System	Used by National Grid System Operation to control and monitor the Gas Transmission system, and also to provide market information to interested stakeholders within the gas industry.
	Interconnector	A pipeline transporting gas to another country. The Irish Interconnector transports gas across the Irish Sea to both the Republic of Ireland and Northern Ireland. The Belgian Interconnector (IUK) transports gas between Bacton and Zeebrugge. The Belgian Interconnector is capable of flowing gas in either direction. The Dutch Interconnector (BBL) transports gas between Balgzand in the Netherlands and Bacton. It is currently capable of flowing only from the Netherlands to the UK.

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Acronym	Term	Definition
IPPC	Integrated Pollution Prevention & Control Directive 1999	Emissions from our installations are subject to EU wide legislation; the predominant legislation is the Integrated Pollution Prevention & Control (IPPC) Directive 1999, the Large Combustion Plant Directive (LCPD) 2001 and the Industrial Emissions Directive (IED) 2010. The requirements of these directives have now been incorporated into the Environmental Permitting (England and Wales) (Amendment) Regulations 2013 (with similar regulations applying in Scotland). IPPC aims to reduce emissions from industrial installations and contributes to meeting various environment policy targets and compliance with EU directives. Since 31 October 2000, new installations are required to apply for an IPPC permit. Existing installations were required to apply for an IPPC permit over a phased timetable until October 2007.
IUK	Interconnector (UK)	A bi-directional gas pipeline between Bacton in the UK and Zeebrugge Belgium. http://www.interconnector.com
KWh	Kilowatt Hour	A unit of energy used by the gas industry. Approximately equal to 0.0341 therms. One Megawatt hour (MWh) equals 1000 kWh, one Gigawatt hour (GWh) equals 1000MWh, and one Terawatt hour (TWh) equals 1000 GWh.
LCP	Large Combustion Plant Directive 2001	The Large Combustion Plant Directive is a European Union Directive which introduced measures to control the emissions of sulphur dioxide, oxides of nitrogen and dust from large combustion plant, including power stations.
LDZ	Local Distribution Zone	A gas distribution zone connecting end users to the (gas) National Transmission System.
	Linepack	The volume of gas within the National or Local Transmission System at any time. (See Also: PCLP)
LNG	Liquefied Natural Gas	LNG is formed by chilling gas to -161˚C so that it occupies 600 times less space than in its gaseous form. www2.nationalgrid.com/uk/Services/Grain-lng/what-is-lng/
LNGS	Liquefied Natural Gas Storage	The storage of Liquefied Natural Gas.
	Load Duration Curve (1 in 50 Severe)	The 1 in 50 severe load duration curve is that curve which, in a long series of years, with connected load held at the levels appropriate to the year in question, would be such that the volume of demand above any given demand threshold (represented by the area under the curve and above the threshold) would be exceeded in one out of fifty years.
	Load Duration Curve (Average)	The average load duration curve is that curve which, in a long series of winters, with connected load held at the levels appropriate to the year in question, the average volume of demand above any given threshold, is represented by the area under the curve and above the threshold.
	Low Carbon Life	A National Grid scenario defined in the Future Energy Scenarios (FES) document whereby compared to the Gone Green scenario more money is available and there is less emphasis on sustainability. There is higher economic growth and society has more disposable income which results in higher uptake of electric vehicles, and more renewable generation at a local level.
LRS	Long range storage or seasonal storage	There is one long-range storage site on the national transmission system: Rough, situated off the Yorkshire coast. Rough is owned by Centrica and mainly puts gas into storage (called 'injection') in the summer and takes gas out of storage in the winter. http://www2.nationalgrid.com/UK/Our-company/Gas/Gas-Storage/
LTS	Local Transmission System	A pipeline system operating at >7 barg that transports gas from NTS / LDZ offtakes to distribution system low pressure pipelines. Some large users may take their gas direct from the LTS.
LTSEC	Long Term System Entry Capacity (LTSEC)	NTS Entry Capacity available on a long term basis (up to 17 years into the future) via an auction process. This is also known as Quarterly System Entry Capacity (QSEC).
m3	Cubic Metre	The unit of volume, expressed under standard conditions of temperature and pressure, approximately equal to 35.37 cubic feet. One million cubic metres (mcm) are equal to 106 cubic metres, one billion cubic metres (bcm) equals 109 cubic metres.
mcm	Million cubic metres	Unit or measurement of volume, used in the gas industry. 1 mcm = 1,000,000 cubic metres

Acronym	Term	Definition
	Margins Notice	The purpose of the Margins Notice is to provide the industry with a day ahead signal that there may be the need for a market response to a potential physical supply / demand imbalance.
MCP	Medium Combustion Plant (Directive)	The Medium Combustion Plant (MCP) directive will apply limits on emissions to air from sites below 50MW thermal input. MCP is likely to come into force by 2020.
MRS	Medium-Range Storage	Typically, these storage facilities have very fast injection and withdrawal rates that lend themselves to fast day to day turn rounds as market prices and demand dictate.
MWh	Megawatt hour	1,000,000 watts, a measure of power usage or consumption in 1 hour.
NBP	National Balancing Point	The wholesale gas market in Britain has one price for gas irrespective of where the gas comes from. This is called the national balancing point (NBP) price of gas and is usually quoted in price per therm of gas.
NCS	Norwegian Continental Shelf	The Norwegian Continental Shelf (NCS) comprises those areas of the sea bed and subsoil beyond the territorial sea over which Norway exercises rights of exploration and exploitation of natural resources. NCS gas comes into the UK via St Fergus and Easington terminals.
NDM	Non-Daily Metered	A meter that is read monthly or at longer intervals. For the purposes of daily balancing, the consumption is apportioned, using an agreed formula, and for supply points consuming more than 73.2MWh pa, reconciled individually when the meter is read.
NDP	Network Development Process	NDP defines the method for decision making, optioneering, development, sanction, delivery and closure for all National Grid gas projects. The aim of the NDP is to deliver projects that have the lowest whole-life cost, are fit for purpose and meet stakeholder and RIIO requirements.
NEA	Network Exit Agreement	A NEA is signed by the gas shipper prior to any gas flowing on to the system. Within the NEA the gas transporter sets out the technical and operational conditions of the connection such as the gas quality requirements, the maximum permitted flow rate and ongoing charges.
NExA	Network Exit Agreement	A NExA is signed by a gas shipper or Distribution Network Operator prior to any gas being taken off the system. Within the NExA the gas transporter sets out the technical and operational conditions of the offtake such as the maximum permitted flow rate, the assured offtake pressure and ongoing charges.
NGSE	Network Gas Supply Emergency	A NGSE occurs when National Grid is unable to maintain a supply – demand balance on the NTS using its normal system balancing tools. A NGSE could be caused by a major loss of supplies to the system as a result of the failure of a gas terminal or as the result of damage to a NTS pipeline affecting the ability of the system to transport gas to consumers. In such an event the Network Emergency Co-ordinator (NEC) would be requested to declare a NGSE. This would enable National Grid to use additional balancing tools to restore a supply – demand balance. Options include requesting additional gas supplies be delivered to the NTS or requiring gas consumers, starting with the largest industrial consumers, to stop using gas. These tools will be used, under the authorisation of the NEC, to try to maintain supplies as long as possible to domestic gas consumers.
NOM	Network Output Measure	RIIO has introduced Network Output Measures (NOMs) (previously Network Replacement Outputs) as a proxy for measuring the health and thus level of risk on the gas network. There are specific targets which are related to the condition of the NTS which must be met. Asset health is a key RIIO measure in terms of allowances and output. The targets cover an eight year period from 2013 to 2021.
NOx	Nitrous Oxide	A group of chemical compounds, some of which are contributors to pollution, acid rain or are classified as greenhouse gases.
NP	No Progression Scenario	Compared to Gone Green there is less money available and less emphasis on sustainability. There is slower economic recovery and Government policy and regulation remains the same as today, and no new targets are introduced. The 2020 renewable energy target for 2020 is unlikely to be met.
NTS	National Transmission System	A high-pressure gas transportation system consisting of compressor stations, pipelines, multijunction sites and offtakes. NTS pipelines transport gas from terminals to NTS offtakes and are designed to operate up to pressures of 94 bar(g).

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Acronym	Term	Definition
	National Transmission System Offtake	An installation defining the boundary between NTS and LTS or a very large consumer. The offtake installation includes equipment for metering, pressure regulation, odourisation equipment etc.
NWE	North West European (Hub)	The wholesale gas market in North West Europe has one price for gas irrespective of where the gas comes from. This is called the North West European (NWE) hub price of gas and is usually quoted in price per therm of gas.
	Oil & Gas UK	Oil & Gas UK is a representative body for the UK offshore oil and gas industry. It is a not-for-profit organisation, established in April 2007. http://www.oilandgasuk.co.uk
OCGT	Open Cycle Gas Turbine	Gas turbines in which air is first compressed in the compressor element before fuel is injected and burned in the combustor. (See also, CCGT)
OCM	On the Day Commodity Market	This market constitutes the balancing market for GB and enables anonymous financially cleared on the day trading between market participants.
	Odourisation	The process by which the distinctive odour is added to gas supplies to make it easier to detect leaks.
OFGEM	Office of Gas and Electricity Markets	The UK's independent National Regulatory Authority, a non-ministerial government department. Their principal objective is to protect the interests of existing and future electricity and gas consumers.
OM	Operating Margins	Gas used by National Grid Transmission to maintain system pressures under certain circumstances, including periods immediately after a supply loss or demand forecast change, before other measures become effective and in the event of plant failure, such as pipe breaks and compressor trips.
	Own Use Gas	Gas used by National Grid to operate the transportation system. Includes gas used for compressor fuel, heating and venting.
pa	Per annum	Per year
PARCA	Planning and Advanced Reservation of Capacity Agreement	A solution developed in line with the enduring incremental capacity release solutions which have been developed following the implementation of the Planning Act (2008). PARCAs were implemented on 1st February 2015 and replace the functions of PCAs and ARCAs. (See also ARCA & PCA)
PCA	Planning Consent Agreement	Planning Consent Agreements were made in relation to NTS Entry and Exit Capacity requests and comprised a bilateral agreement between National Grid and developers, DNOs or Shippers whereby National Grid assessed the Need Case for NTS reinforcement and would undertake any necessary planning activities ahead of a formal capacity signal from the customer. Where a Need Case was identified, the customer would underwrite National Grid NTS to undertake the required statutory Planning Act activities such as strategic optioneering, Environmental Impact Assessment, statutory and local community consultations, preparation of the Development Consent Order (DCO) and application. This has now been replaced by the PARCA process. (See PARCA)
PCLP	Projected Closing Linepack	Linepack is the volume of gas stored within the NTS. Throughout a gas day linepack levels fluctuate due to imbalances between supply and demand over the day. National Grid, as residual balancer of the UK gas market, need to ensure an end-of-day market balance where total supply equals, or is close to, total demand. The Projected Closing Linepack (PCLP) metric is used as an indicator of end-of-day market balance. (See Also: Linepack)
	Peak Day Demand	The 1-in-20 peak day demand is the level of demand that, in a long series of winters, with connected load held at levels appropriate to the winter in question, would be exceeded in one out of 20 winters, with each winter counted only once.
QSEC	Quarterly System Entry Capacity	NTS entry capacity available on a long term basis (up to 17 years into the future) via an auction process. Also known as Long Term System Entry Capacity (LTSEC).
	RIIO-T1	RIIO relates to the current Ofgem price control period which runs from 1 April 2013 to 31 March 2021. For National Grid Transmission this is referred to as RIIO-T1.

Acronym	Term	Definition
	Safety Monitors	Safety Monitors in terms of space and deliverability are minimum storage requirements determined to be necessary to protect loads that cannot be isolated from the network and also to support the process of isolating large loads from the network. The resultant storage stocks or monitors are designed to ensure that sufficient gas is held in storage to underpin the safe operation of the gas transportation system under severe conditions. There is now just a single safety monitor for space and one for deliverability. These are determined by National Grid to meet its Uniform Network Code requirements and the terms of its safety case. Total shipper gas stocks should not fall below the relevant monitor level (which declines as the winter progresses). National Grid is required to take action (which may include use of emergency procedures) in order to prevent storage stocks reducing below this level.
SEAL	Shearwater Elgin Area Line	The offshore pipeline from the Central North Sea (CNS) to Bacton.
SEPA	Scottish Environment Protection Agency	The environmental regulator for Scotland.
	Shale Gas	Shale gas is natural gas that is found is shale rock. It is extracted by injecting water, sand and chemicals into the shale rock to create cracks or fractures so that the shale gas can be extracted. https://www.gov.uk/government/publications/about-shale-gas-and-hydraulic-fracturing-fracking
	Shipper or Uniform Network Code (Shipper) User	A company with a Shipper Licence that is able to buy gas from a producer, sell it to a supplier and employ a GT to transport gas to consumers.
	Shrinkage	Gas that is input to the system but is not delivered to consumers or injected into storage. It is either Own Use Gas or Unaccounted for Gas.
SHQ	Supply Hourly Quantity	Supply Hourly Quantity
SNCWV	Seasonal Normal Composite Weather Variable	The seasonal normal value of the CWV is the smoothed average of the values of the applicable CWV for that day in a significant number of previous years. (See Also: CWV)
	System Operability	The ability to maintain system stability and all of the asset ratings and operational parameters within pre-defined limits safely, economically and sustainably.
SO	System Operator	An entity entrusted with transporting energy in the form of natural gas or power on a regional or national level, using fixed infrastructure. Unlike a TSO, the SO may not necessarily own the assets concerned. For example, National Grid operates the electricity transmission system in Scotland, which is owned by Scottish Hydro Electricity Transmission and Scottish Power.
SOQ	Supply Offtake Quantity	The maximum daily consumption at a Supply Point.
SOR	Strategic Options Report	Output of the PCA, ARCA and PARCA statutory Planning Act activities reporting to the customer on the findings of optioneering analysis by National Grid in relation to the customer request for NTS Entry or Exit Capacity.
SP	Slow Progression Scenario	A National Grid scenario defined in the Future Energy Scenarios (FES) document whereby the 2020 renewable energy target for 2020 is not met. Although regulation and targets are similar to the Gone Green scenario there is less economic growth which prevents delivery of environmental policy and targets.
SRS	Short Range Storage	These are commercially operated sites that have shorter injection/withdrawal times so can react more quickly to demand, injecting when demand or prices are lower and withdrawing when higher.
	Substitution	Capacity substitution is the process of moving unsold capacity from one or more system points to another, where demand for that capacity exceeds the available capacity quantities for the relevant period. This avoids the construction of new assets or material increases in operational risk.
	Supplier	A company with a supplier's licence contracts with a shipper to buy gas, which is then sold to consumers. A supplier may also be licensed as a shipper.
	Supply Point	A group of one or more meter points at a site.

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Acronym	Term	Definition
	Therm	An imperial unit of energy. Largely replaced by the metric equivalent: the kilowatt hour (kWh). 1 therm equals 29.3071 kWh.
TO	Transmission Owner	National Grid owns the gas National Transmission System (NTS) in Great Britain. As the TO National Grid must make sure all assets on the NTS are fit for purpose and safe to operate. Effective maintenance plans and asset replacement schedules are developed and implemented to keep the gas flowing.
TPC	Transmission Planning Code	The Transmission Planning Code describes National Grid's approach to planning and developing the NTS in accordance with its duties as a gas transporter and other statutory obligations relating to safety and environmental matters. The document is subject to approval by the Gas and Electricity Markets Authority (GEMA).
	Transmission System Operator	Operator of a Gas Transmission Network under licence issued by the Gas and Electricity Markets Authority (GEMA) and regulated by OFGEM
TWh	Terrawatt hour	1,000,000,000,000 watt hours, a unit of energy
UAG	Unaccounted for Gas	Gas "lost" during transportation. Includes leakage, theft and losses due to the method of calculating the Calorific Value.
UK	United Kingdom of Great Britain and Northern Ireland	A geographical, social and economic grouping of countries that contains England, Scotland, Wales and Northern Ireland.
UKCS	United Kingdom Continental Shelf	The UK Continental Shelf (UKCS) comprises those areas of the sea bed and subsoil beyond the territorial sea over which the UK exercises sovereign rights of exploration and exploitation of natural resources.
UNC	Uniform Network Code	The Uniform Network Code is the legal and commercial framework that governs the arrangements between the Gas Transporters and Shippers operating in the UK gas market. The UNC comprises different documents including the Transportation Principal Document (TPD) and Offtake Arrangements Document (OAD).
VSD	Variable Speed Drives	Compressor technology where the drive speed can be varied with changes in capacity requirement. Variable speed drive compressors compared to constant speed compressors are more energy efficient and operate more quietly by varying speed to match the workload.
	Weather corrected	The actual demand figure that has been adjusted to take account of the difference between the actual weather and the seasonal normal weather.
WLP	Whole Life Prioritisation	The WLP provides the criteria used to prioritise all of the options considered as part of the Network Development Process (NDP). The scoring from the WLP Model aids the decision making process by discounting unsuitable options at an early stage of the NDP.