GAS SPECIFICATIONS

APPENDIX C

to

STANDARD TERMS AND CONDITIONS

for

TRANSPORTATION

of

GAS

in the

OFFSHORE PIPELINES

to

the Danish West Coast

Date: 24 September 2018

1 GAS SPECIFICATIONS AT THE DELIVERY POINT(S)

Gas delivered by the Shipper at the Delivery Point(s) shall comply with the Gas Specifications stipulated in the table below in this Article.

Relative density	Parameter	Unit	Requirement
CO2mole %max 2.5O2mole %max 0.1 on a 24-hour basisH2S + COSmg(S)/m³max 5Mercaptanmg(S)/m³max 6Total sulphurmg(S)/m³max 30Water dew point°Cmax -8 at pressures 0-70 Bar absoluteHydrate formation°Cno formations above -8 at pressures 0-70 Bar absoluteHydrocarbon dew point°Cmax -2 at pressures 0-70 Bar absoluteDust and liquidsThe Gas shall be technically free of gaseous, solid or liquid substances to the extent that this may involve a risk of blocking and malfunction or corrosion of ordinary gas installations and standard gas equipment. This does not apply to liquid formation that occasionally occurs in Gas in the form of very small droplets and that cannot be removed from it.OdorisationThe Gas shall be delivered unodorised.Other components and contaminantsThe Gas shall not contain other components and/or contaminants to an extent which may imply that it cannot be transported, stored and/or marketed without further adjustment of the quality or treatment of the Gas.Temperature°C0 - 50Pressure at the DeliveryBar gaugeNecessary pipeline pressure between 50 and 138	Wobbe index 1)	MJ/m^3	50.76 - 55.80
O₂ mole % max 0.1 on a 24-hour basis H₂S + COS mg(S)/m³ max 5 Mercaptan mg(S)/m³ max 6 Total sulphur mg(S)/m³ max 30 Water dew point °C max -8 at pressures 0-70 Bar absolute Hydrate formation °C max -2 at pressures 0-70 Bar absolute Hydrocarbon dew point °C max -2 at pressures 0-70 Bar absolute Dust and liquids The Gas shall be technically free of gaseous, solid or liquid substances to the extent that this may involve a risk of blocking and malfunction or corrosion of ordinary gas installations and standard gas equipment. This does not apply to liquid formation that occasionally occurs in Gas in the form of very small droplets and that cannot be removed from it. Odorisation The Gas shall be delivered unodorised. Other components and contaminants The Gas shall not contain other components and/or contaminants to an extent which may imply that it cannot be transported, stored and/or marketed without further adjustment of the quality or treatment of the Gas. Temperature °C 0 - 50 Pressure at the Delivery Point Tyra East Necessary pipeline pressure between 50 and 138	Relative density	-	0.555 - 0.700
H2S + COSmg(S)/m³max 5Mercaptanmg(S)/m³max 6Total sulphurmg(S)/m³max 30Water dew point°Cmax -8 at pressures 0-70 Bar absoluteHydrate formation°Cno formations above -8 at pressures 0-70 Bar absoluteHydrocarbon dew point°Cmax -2 at pressures 0-70 Bar absoluteDust and liquidsThe Gas shall be technically free of gaseous, solid or liquid substances to the extent that this may involve a risk of blocking and malfunction or corrosion of ordinary gas installations and standard gas equipment. This does not apply to liquid formation that occasionally occurs in Gas in the form of very small droplets and that cannot be removed from it.OdorisationThe Gas shall be delivered unodorised.Other components and contaminantsThe Gas shall not contain other components and/or contaminants to an extent which may imply that it cannot be transported, stored and/or marketed without further adjustment of the quality or treatment of the Gas.Temperature°C0-50Pressure at the Delivery Point Tyra EastNecessary pipeline pressure between 50 and 138	CO_2	mole %	max 2.5
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	taminants	taminants to an extent which may imply that it cannot be	
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Pressure at the Delivery Bar gauge Necessary pipeline pressure between 50 and 138			
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	Point Tyra East		
Pressure at the Delivery Bar gauge Necessary pipeline pressure between 80	Pressure at the Delivery	Bar gauge	Necessary pipeline pressure between 80
Point South Arne and 138 1) Wobbe index is defined as Gross Calorific Value divided by the square root of the relative density.			

¹⁾ Wobbe index is defined as Gross Calorific Value divided by the square root of the relative density.

If the operator of the Transmission System should change the requirements valid for the Redelivery Point (currently referred to in the Danish Network Code as 'Quality and Delivery Specifications'), the Operator is entitled to amend (with the exception of Temperature and Pressure) the table in this Article correspondingly with effect from the same date as the effective date of the changed Quality and Delivery Specifications in the Danish Network Code.

2 GAS SPECIFICATIONS AT REDELIVERY POINT

Gas redelivered by the Operator to the Shipper at the Redelivery Point shall comply with the gas specifications required by the Transmission System operator at the Redelivery Point at any time (currently referred to in the Danish Network Code as 'Quality and Delivery Specifications').