

Case studies on how to execute exchange transactions in compliance with section 25 of the balancing group contract

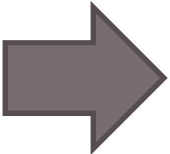


# Contents

1. Aims of this implementation guide
2. Example cases
3. Overview of physical delivery options
4. Proving delivery of physical effect

# Aims of this implementation guide

- The MAM trades gas on the exchange using quality-specific, zone-specific and point-specific products to physically balance any corresponding imbalances arising in its market area.
- Where the MAM effects such quality-specific, zone-specific or point-specific exchange trades, it relies on its counterparty to cause a physical effect within the market area in the gas quality, balancing zone/network area or at the system point agreed in the trade to ensure that the MAM can safeguard the stability of the networks within its market area.
- On the following pages a number of basic example cases are provided to illustrate the practical application of section 25 of the balancing group contract (BGC).



The example cases 1 to 8 are provided for the quality-specific exchange product “PEGAS NCGH”. They apply accordingly to all other quality-specific products traded on the PEGAS exchange for delivery in the market areas NetConnect Germany and Gaspool.

Where the MAM enters into zone-specific or point-specific exchange trades, the relevant transaction is subject to the additional delivery restriction - alongside gas quality - that deliveries must be made in the relevant balancing zone/network area or at the relevant system point.

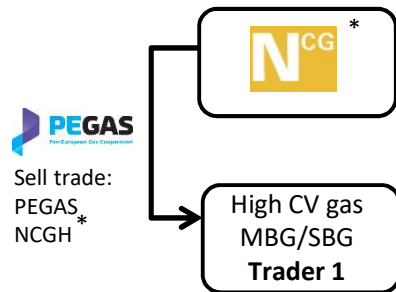
The example cases 9 to 12 provide illustrations for the execution of exchange trades for point-specific hourly products.

# Case 1

## Trade is offset within own balancing portfolio (section 25(2))

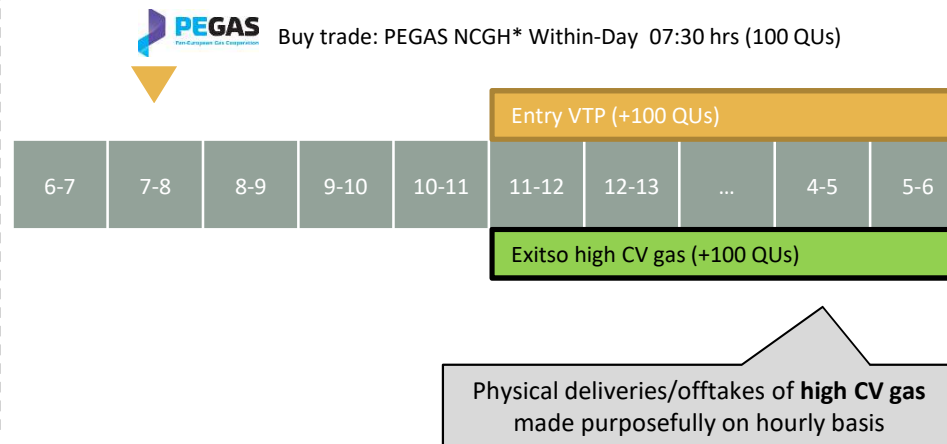
### Chain of trades

Product PEGAS NCGH\*



### Processes in high CV gas balancing groups

"Trader 1"



### Requirements

pursuant to section 25 BGC

Physical deliveries/offtakes outside of conversion mechanism	✓
Physical deliveries/offtakes from within own balancing portfolio (burden of proof: Trader 1)	✓
Purposeful/hourly delivery of physical effect	✓
Physical deliveries/offtakes made by VTP counterparty (burden of proof: Trader 1)	-



**Requirements are fully met**

QU = quantity unit

MBG/SBG = master/subordinate balancing group

\* Applies accordingly to all exchange-traded products subject to specific physical delivery restrictions which are traded for delivery in the market area GASPOOL

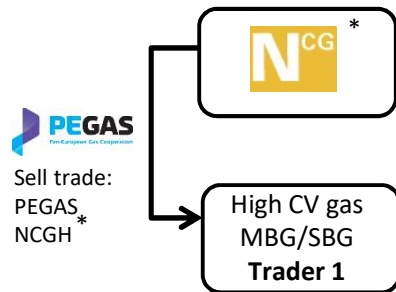
Current as at March 2019

# Case 2

## No purposeful delivery of physical effect (section 25(2))

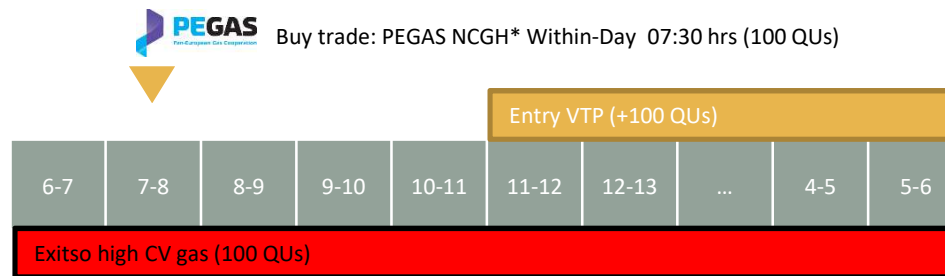
### Chain of trades

Product PEGAS NCGH\*



### Processes in high CV gas balancing groups

"Trader 1"



Physical deliveries/offtakes of **high CV gas**  
not made purposefully on hourly basis

### Requirements

pursuant to section 25 BGC

Physical deliveries/offtakes outside of conversion mechanism	✓
Physical deliveries/offtakes from within own balancing portfolio (burden of proof: Trader 1)	✓
Purposeful/hourly delivery of physical effect	X
Physical deliveries/offtakes made by VTP counterparty (burden of proof: Trader 1)	-



**Requirements are not fully met**

QU = quantity unit

MBG/SBG = master/subordinate balancing group

\* Applies accordingly to all exchange-traded products subject to specific physical delivery restrictions which are traded for delivery in the market area GASPOOL

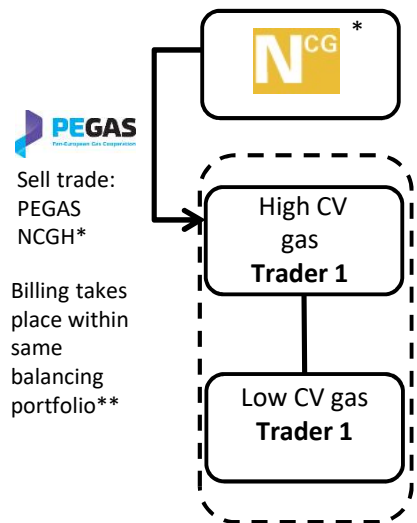
Current as at March 2019

# Case 3

## Trade is offset through conversion mechanism (section 25(6))

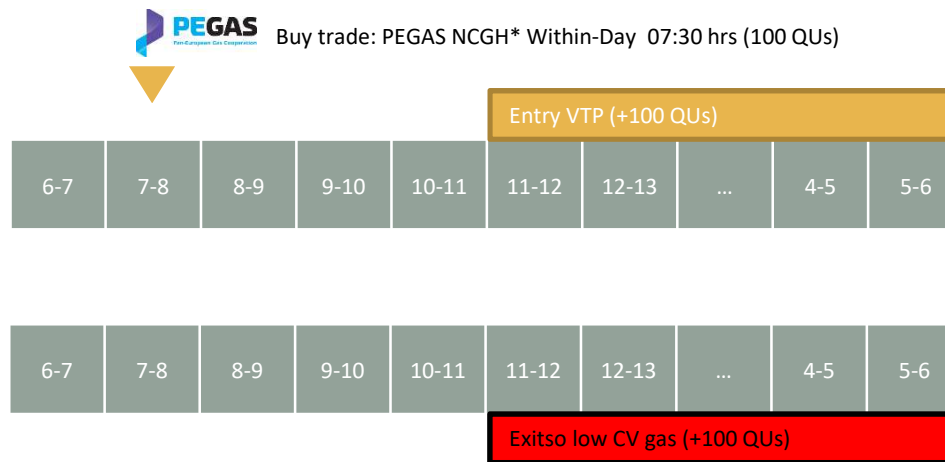
### Chain of trades

Product PEGAS NCGH\*



### Processes in high CV gas balancing groups

"Trader 1"



### Requirements

pursuant to section 25 BGC

Physical deliveries/offtakes outside of conversion mechanism	X
Physical deliveries/offtakes from within own balancing portfolio (burden of proof: Trader 1)	✓
Purposeful/hourly delivery of physical effect	✓
Physical deliveries/offtakes made by VTP counterparty (burden of proof: Trader 1)	-



**Requirements are not fully met**

\* Applies accordingly to all exchange-traded products subject to specific physical delivery restrictions which are traded for delivery in the market area GASPOOL

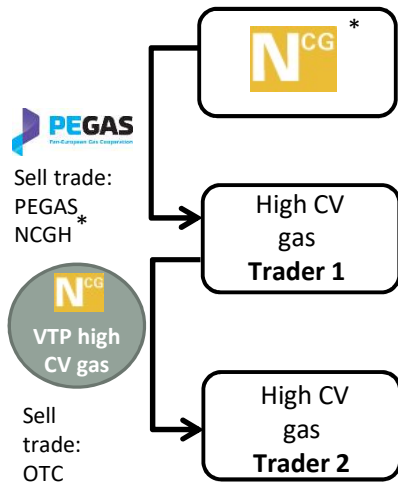
\*\* Regardless of whether the relevant balancing groups are linked, the trade may not be physically settled in a gas quality other than the traded gas quality.

No physical deliveries/offtakes of **high CV gas** due to use of virtual conversion mechanism

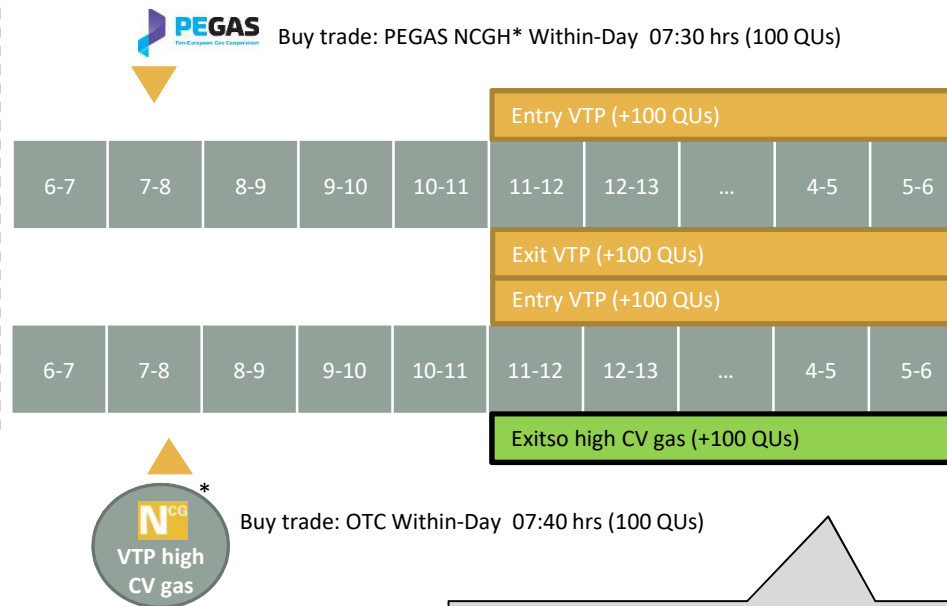
# Case 4

## Trade is offset by VTP trade (section 25(7))

### Chain of trades Product PEGAS NCGH\*



### Processes in high CV gas balancing groups "Trader 1" and "Trader 2"



Physical deliveries/offtakes of high CV gas are effected by Trader 2 (vicarious agent) but procured by Trader 1\*\*

### Requirements

pursuant to section 25 BGC

Physical deliveries/offtakes outside of conversion mechanism	✓
Physical deliveries/offtakes from within own balancing portfolio (burden of proof: Trader 1)	-
Purposeful/hourly delivery of physical effect	✓
Physical deliveries/offtakes made by VTP counterparty (burden of proof: Trader 1)	✓

**Requirements are fully met**

\* Applies accordingly to all exchange-traded products subject to specific physical delivery restrictions which are traded for delivery in the market area GASPOOL

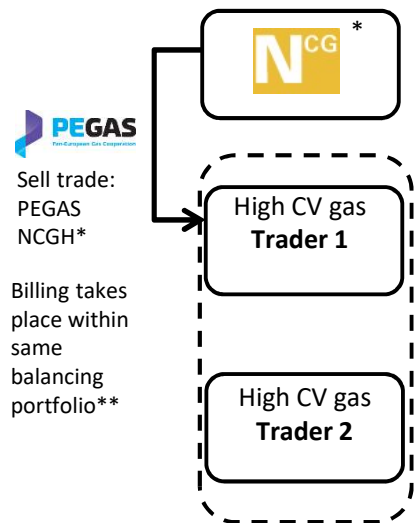
\*\* The obligation to the MAM remains with Trader 1

# Case 5

## Trade is offset within own portfolio by third party (section 25(5))

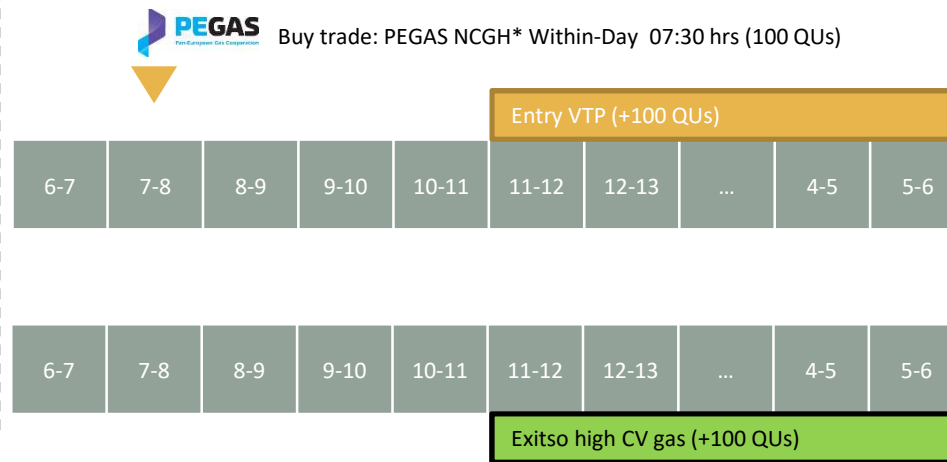
### Chain of trades

Product PEGAS NCGH\*



### Processes in high CV gas balancing groups

“Trader 1” and “Trader 2”



### Requirements

pursuant to section 25 BGC

Physical deliveries/offtakes outside of conversion mechanism	✓
Physical deliveries/offtakes from within own balancing portfolio (burden of proof: Trader 1)	✓
Purposeful/hourly delivery of physical effect	✓
Physical deliveries/offtakes made by VTP counterparty (burden of proof: Trader 1)	-



**Requirements are fully met**

\* Applies accordingly to all exchange-traded products subject to specific physical delivery restrictions which are traded for delivery in the market area GASPOOL

\*\* Regardless of whether the relevant balancing groups are linked, the trade may not be physically settled in a gas quality other than the traded gas quality.

\*\*\* The obligation to the MAM remains with Trader 1

Physical deliveries/offtakes of **high CV gas** are effected by Trader 2 (vicarious agent) but procured by Trader 1\*\*\*

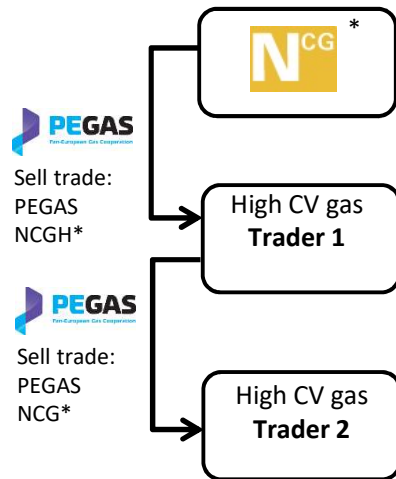


# Case 6

## Buy trade PEGAS NCGH and sell trade PEGAS NCG\*\* (section 25(2))

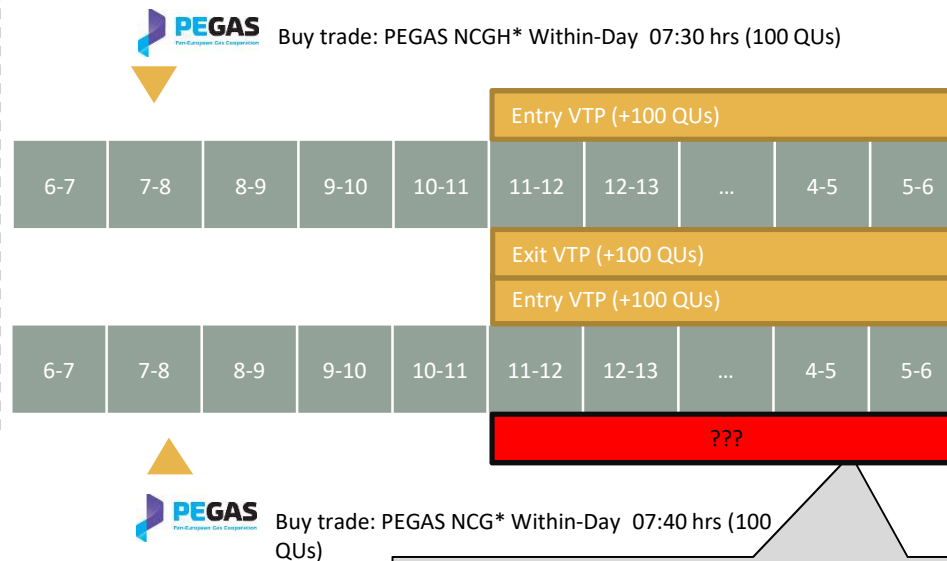
### Chain of trades

Product PEGAS NCGH\*



### Processes in high CV gas balancing groups

"Trader 1" and "Trader 2"



### Requirements

pursuant to section 25 BGC

Physical deliveries/offtakes outside of conversion mechanism	✓
Physical deliveries/offtakes from within own balancing portfolio (burden of proof: Trader 1)	X
Purposeful/hourly delivery of physical effect	X
Physical deliveries/offtakes made by VTP counterparty (burden of proof: Trader 1)	-

**Requirements are not fully met**

\* Applies accordingly to all exchange-traded products subject to specific physical delivery restrictions which are traded for delivery in the market area GASPOOL

\*\* Offsetting the trade by means of a sell trade in the quality-specific order book PEGAS NCGH is not permitted, either.

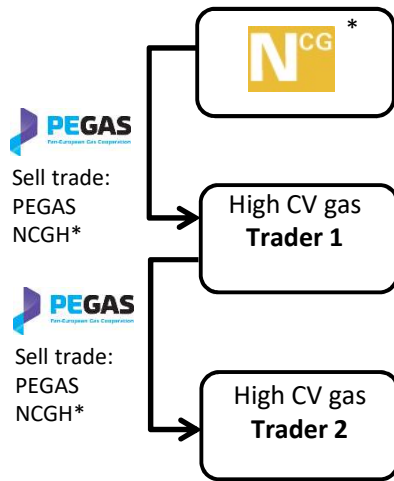
As the trade is made in the non-quality-specific order book PEGAS NCG, trader cannot procure that physical deliveries/offtakes of **high CV gas** will be made

# Case 7

## Trading within quality-specific order book (section 25(8))

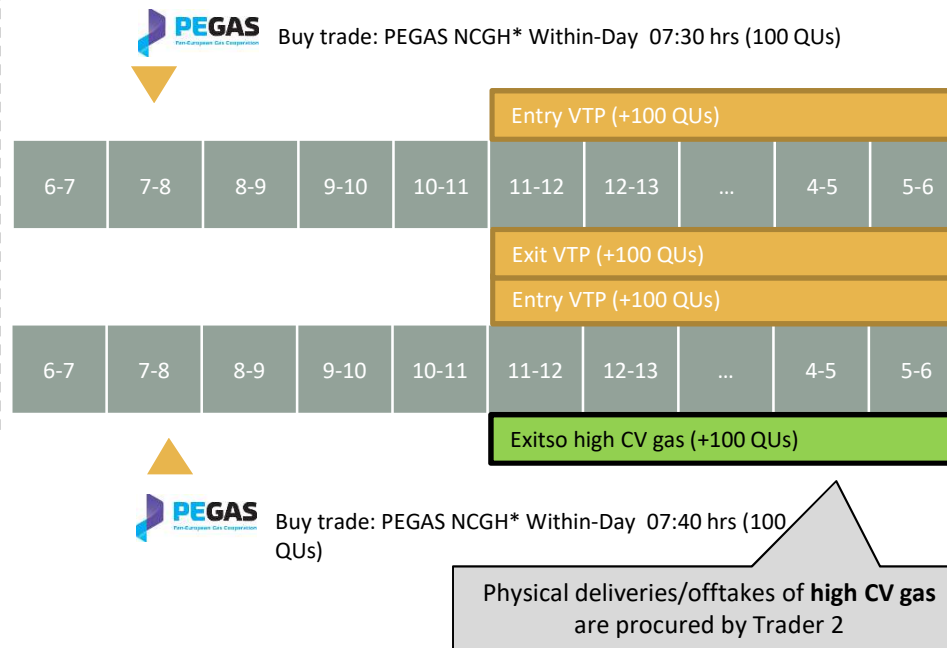
### Chain of trades

Product PEGAS NCGH\*



### Processes in high CV gas balancing groups

"Trader 1" and "Trader 2"



### Requirements

pursuant to section 25 BGC

Physical deliveries/offtakes outside of conversion mechanism	✓
Physical deliveries/offtakes from within own balancing portfolio (burden of proof: Trader 1)	-
Purposeful/hourly delivery of physical effect	✓
Physical deliveries/offtakes made by VTP counterparty (burden of proof: Trader 1)	-

↓

**Requirements are fully met**

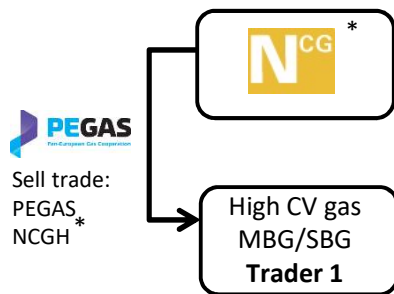
\* Applies accordingly to all exchange-traded products subject to specific physical delivery restrictions which are traded for delivery in the market area GASPOOL

# Case 8

## Meeting demand at exit points using gas of the relevant quality (cf. section 25(4))

### Chain of trades

Product PEGAS NCGH\*

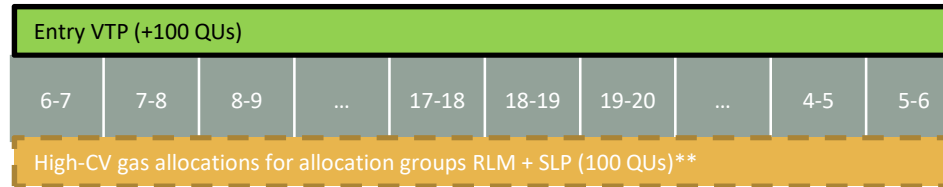


### Processes in high CV gas balancing groups

“Trader 1”

PEGAS Buy trade: PEGAS NCGH\* Day-Ahead (100 QUs)

Physical deliveries/offtakes of **high CV gas**: by entering into a buy trade for PEGAS NCGH the trader ensures that additional physical inputs are avoided in a SystemSELL situation.



### Requirements

pursuant to section 25 BGC

Physical deliveries/offtakes outside of conversion mechanism	✓
Physical deliveries/offtakes from within own balancing portfolio (burden of proof: Trader 1)	✓
Purposeful/hourly delivery of physical effect	✓
Physical deliveries/offtakes made by VTP counterparty (burden of proof: Trader 1)	-



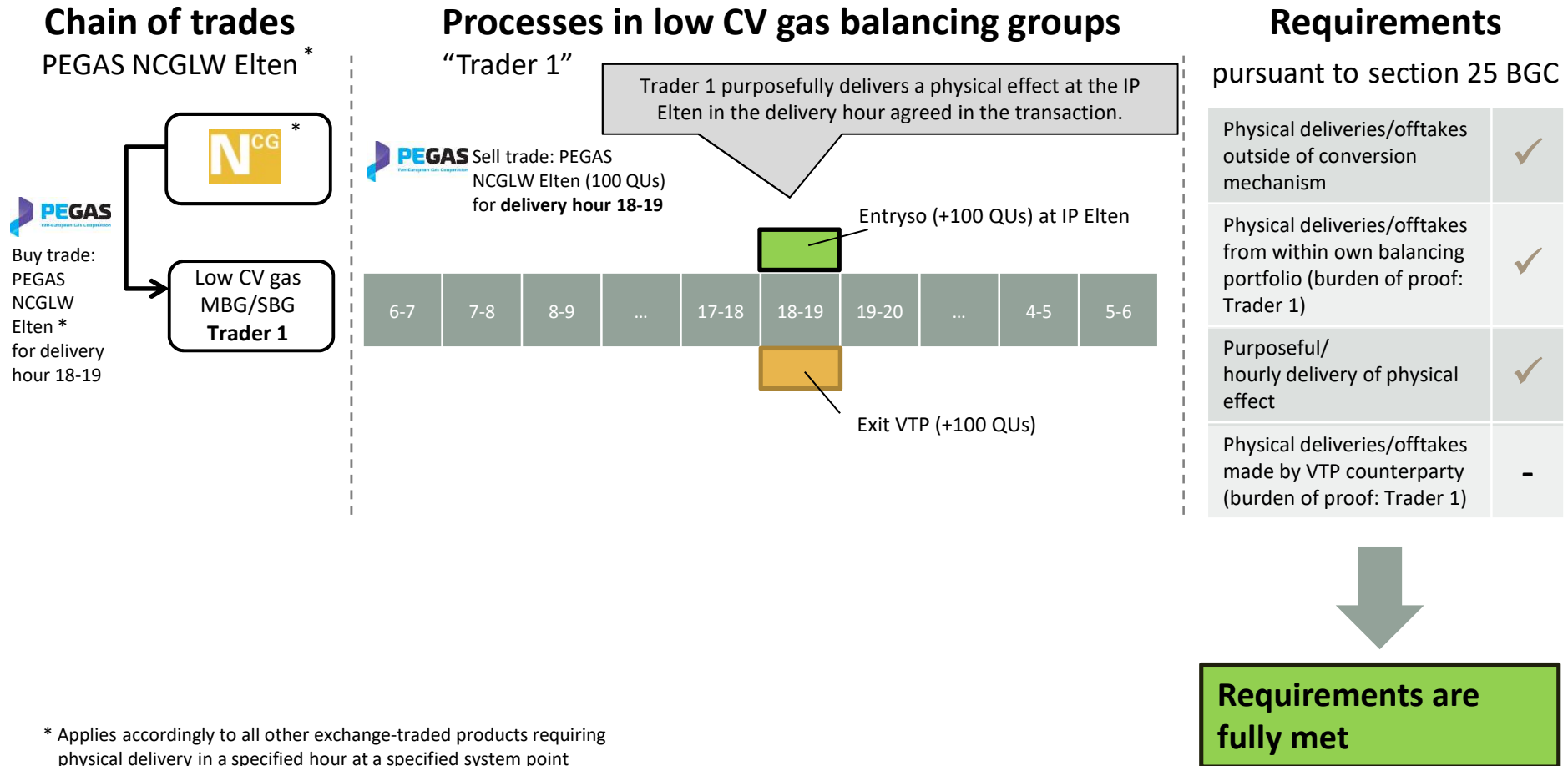
**Requirements are fully met**

\* Applies accordingly to all exchange-traded products subject to specific physical delivery restrictions which are traded for delivery in the market area GASPOOL and to within-day trades effected for a 24-hour delivery period.  
 • If the delivery period of quality-specific within-day transactions is less than 24 hours, the trader is obliged to provide suitable proof of the physical effect to the MAM on request of the MAM. Without limitation, suitable proof includes RLM forecast data (in a data quality in accordance with general market practices) on which the trader based the quality-specific transaction.

\*\* In this case it does not prejudice the trader’s position that the day-ahead PEGAS NCGH trade was effected for the purpose of supplying gas to end users using gas of the corresponding gas quality. For the sake of clarity it should be noted, however, that traders cannot use physical offtakes at SLP exit points to provide a physical effect within the meaning of section 25.

# Case 9

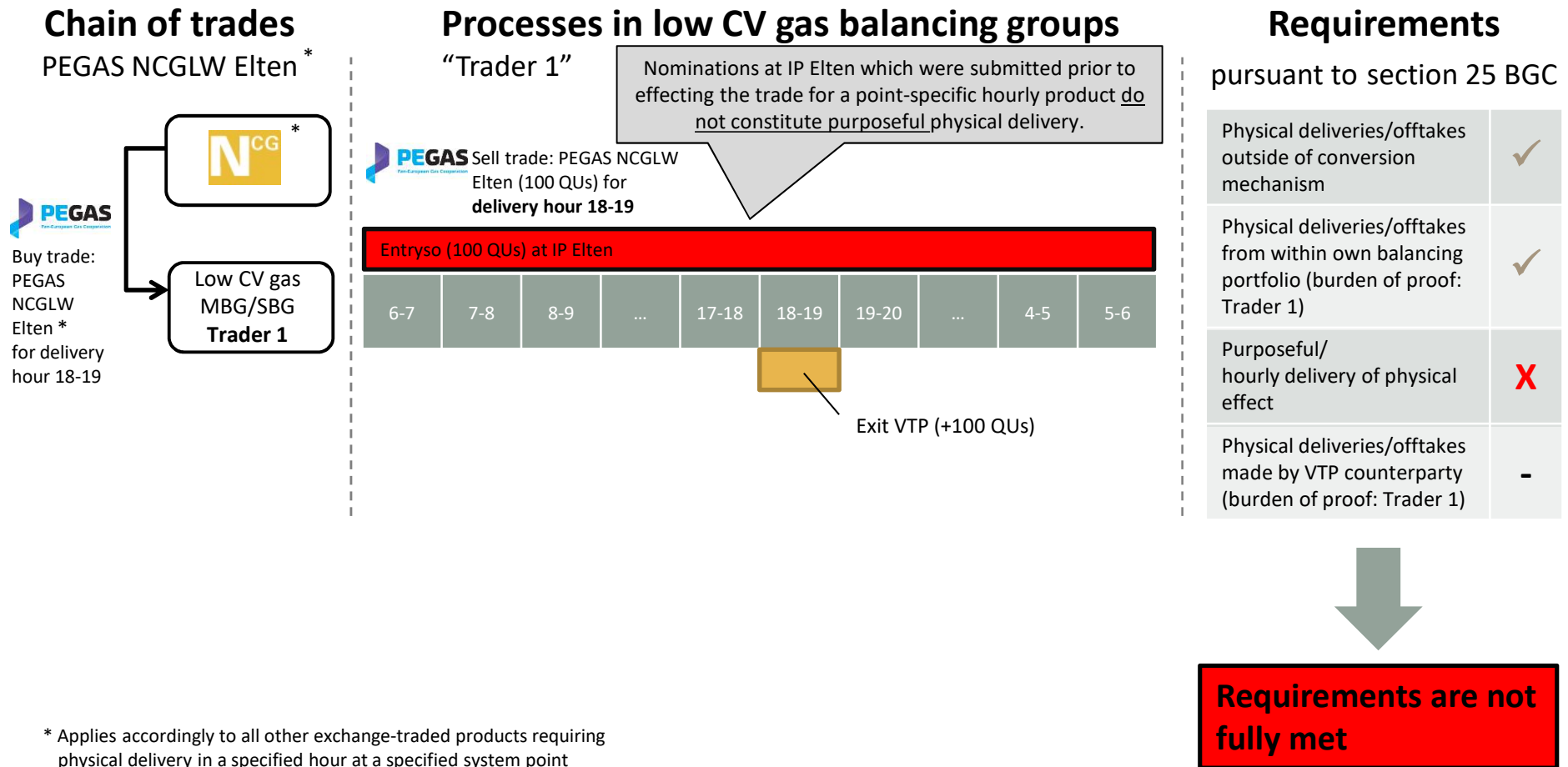
## Delivering on exchange trades for point-specific hourly products in a SystemBuy situation at the IP Elten (1/2) (section 25(4))



\* Applies accordingly to all other exchange-traded products requiring physical delivery in a specified hour at a specified system point

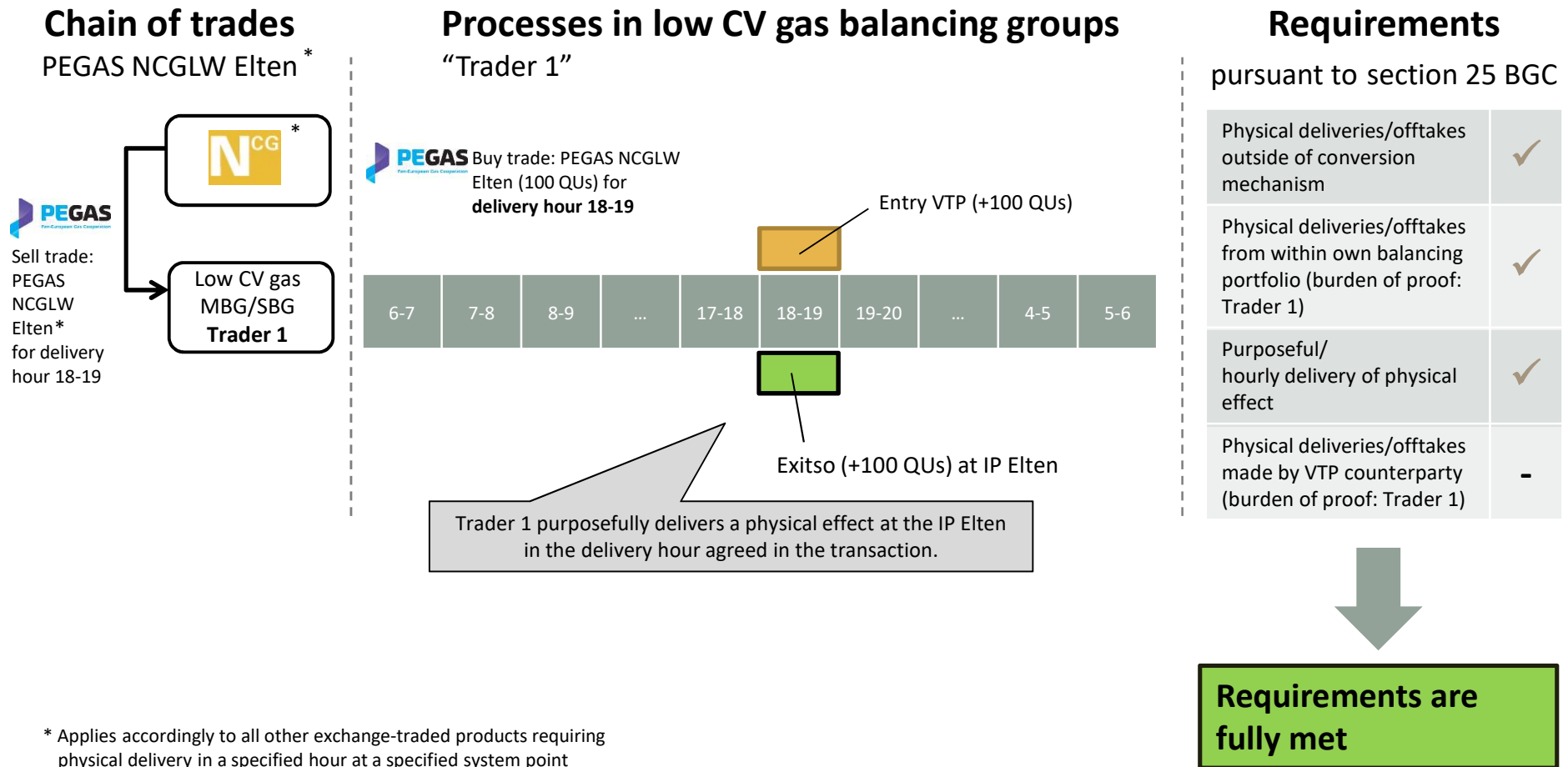
# Case 10

## Delivering on exchange trades for point-specific hourly products in a SystemBuy situation at the IP Elten (2/2) (section 25(2))



# Case 11

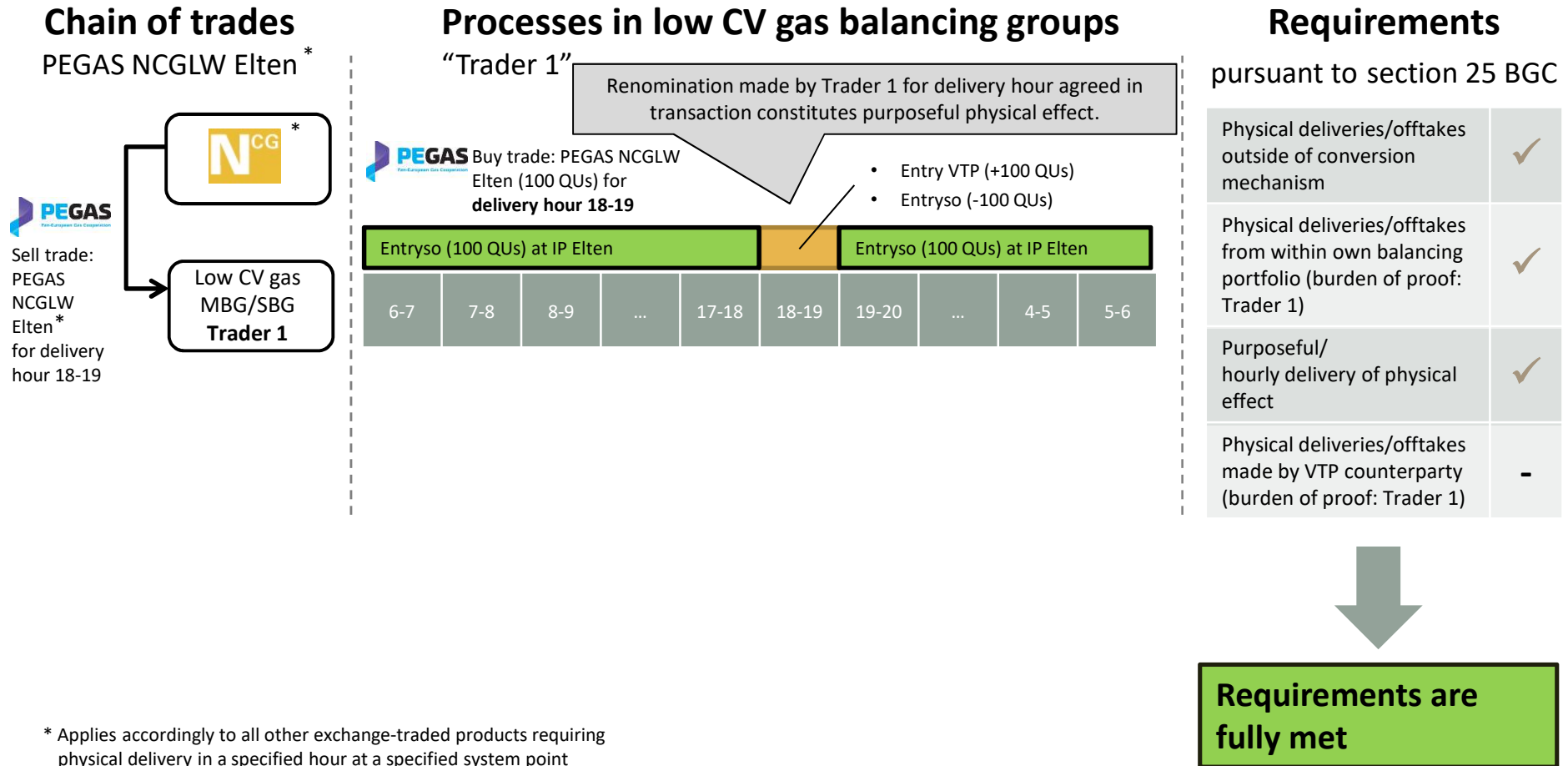
## Delivering on exchange trades for point-specific hourly products in a SystemSell situation at the IP Elten (1/2) (section 25(4))



\* Applies accordingly to all other exchange-traded products requiring physical delivery in a specified hour at a specified system point

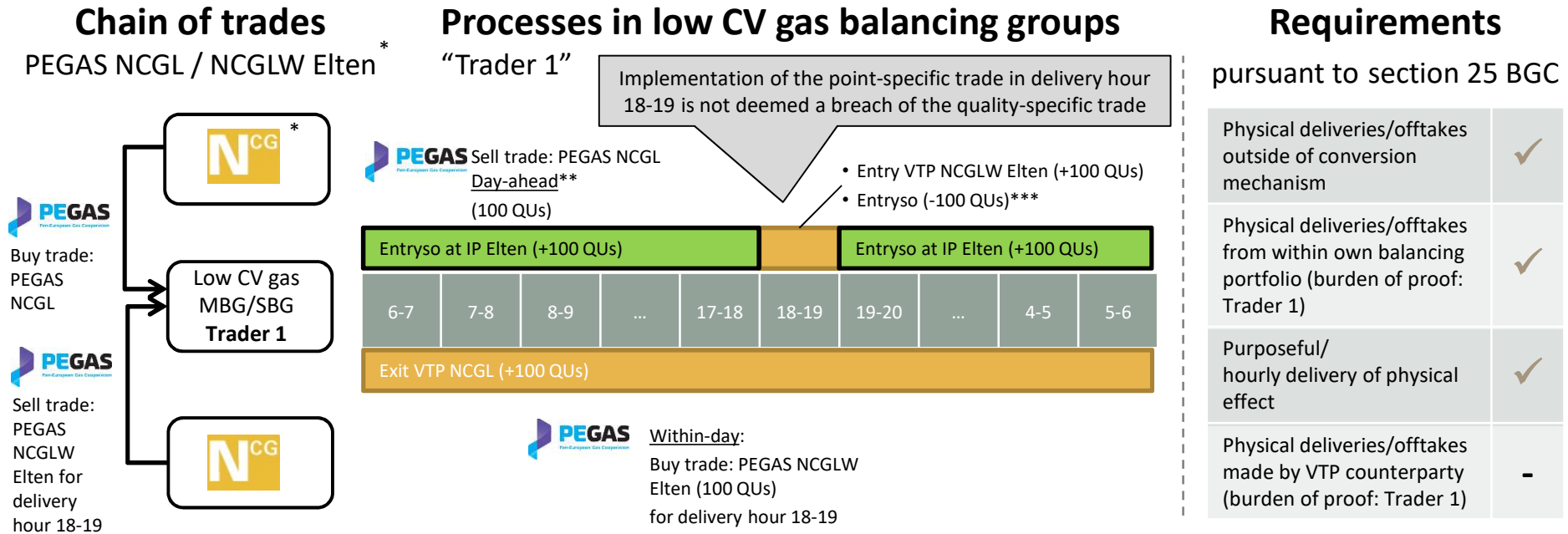
# Case 12

## Delivering on exchange trades for point-specific hourly products in a SystemSell situation at the IP Elten (2/2) (section 25(2))



# Case 13

## Delivering on quality-specific and point-specific trades in opposite directions using the same system point (section 25(2))



\* Applies accordingly to all other exchange-traded products requiring physical delivery in a specified hour at a specified system point in the low CV gas sector

\*\* Applies accordingly to within-day trades

\*\*\* Trader 1's physical entry flow at IP Elten in this hour is effectively reduced to zero. The VTP offtakes allocated for the quality-specific PEGAS NCGL trade do not have a corresponding physical but rather a VTP entry position (low CV gas) of 100 QUs.



# Overview of physical delivery options (1/2)

		Delivering on <i>quality-specific</i> physical exchange trades **										
		Physical points and allocation groups						Exchange trades			VTP	
		High CV gas			Low CV gas							
Product	Trade*	ENTRYSO H	EXITSO H	RLM H	ENTRYSO L	EXITSO L	RLM L	PEGAS NCGH	PEGAS NCGL	PEGAS NCG	VTP H (bilateral)	VTP L (bilateral)
Section 25 BGC	PEGAS NCGH Buy	↓	↑	↑	X	X	X	S	X	X	S <sup>TP</sup>	X
	PEGAS NCGH Sell	↑	↓	↓	X	X	X	B	X	X	B <sup>TP</sup>	X
	PEGAS NCGL Buy	X	X	X	↓	↑	↑	X	S	X	X	S <sup>TP</sup>
	PEGAS NCGL Sell	X	X	X	↑	↓	↓	X	B	X	X	B <sup>TP</sup>

## Legend

↑	Increase
↓	Reduction
B	Buy
S	Sell
S <sup>TP</sup> /B <sup>TP</sup>	Effect is realised by third party
X	Breach of section 25 BGC

\* From the perspective of the trader

\*\* Where MAM enters into zone-specific exchange trades, relevant transaction is subject to additional delivery restriction - alongside gas quality - that deliveries must be made in the relevant balancing zone.

# Overview of physical delivery options (2/2)

Delivering on <b>point-specific</b> physical exchange trades **															
		Physical points and allocation groups						Exchange trades					VTP		
		High CV gas			Low CV gas										
		ENTRYSO H	EXITSO H	RLM H	ENTRYSO L IP***	EXITSO L IP***	RLM L	PEGAS NCGH	PEGAS NCGL	PEGAS NCG	PEGAS NCGLW Elten	PEGAS NCGLO Vreden	VTP H (bilateral)	VTP L (bilateral)	
Product***	Trade*														
Section 25 BGC	PEGAS NCGLW Elten Buy	X	X	X	↓	↑	X	X	X	X	S	X	X	S <sup>TP</sup>	
	PEGAS NCGLW Elten Sell	X	X	X	↑	↓	X	X	X	X	B	X	X	B <sup>TP</sup>	
	PEGAS NCGLO Vreden Buy	X	X	X	↓	↑	X	X	X	X	X	S	X	S <sup>TP</sup>	
	PEGAS NCGLO Vreden Sell	X	X	X	↑	↓	X	X	X	X	X	B	X	B <sup>TP</sup>	

Legend	
↑	Increase
↓	Reduction
B	Buy
S	Sell
S <sup>TP</sup> /B <sup>TP</sup>	Effect is realised by third party
X	Breach of section 25 BGC

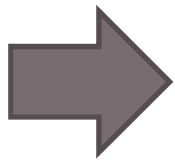
\* From the perspective of the trader

\*\* Where MAM enters into point-specific exchange trades, relevant transaction is subject to additional delivery restriction - alongside gas quality - that deliveries must be made at the relevant system point.

\*\*\* Point of delivery for PEGAS NCGLW Elten => IP Elten; Point of delivery for PEGAS NCGLO Vreden => IP Vreden

# Proving delivery of physical effect (1/2)

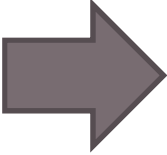
- ... by way of nominations or renominations at physical points
  - confirmation of nominations or renominations made at physical points (market area interconnection points, cross-border interconnection points, storage facilities)
  - proof of purpose: reference = last valid (re-)nomination prevailing when action is taken (plausible for MAM)
- ... by a third party (VTP, balancing portfolio)
  - documentary evidence of vicarious agent being instructed to cause the physical effect
  - confirmation of contract (re-)nominations relating to bilateral supply contracts which expressly require physical deliveries of gas to be made in the relevant gas quality



To cause a physical effect, each (re-)nomination has to be confirmed by the relevant TSO/SSO. To verify that a physical effect was caused purposefully, the MAM may request the (re-)nomination history before and after the exchange trade was entered. The mere sending of (re-)nominations without having a corresponding counter-position before the exchange trade was entered will not be considered a physical effect.

# Proving delivery of physical effect (2/2)

- ... by increasing/reducing consumption at an RLM exit point\*
  - documentary evidence of the trading party instructing the end user to flow gas to a certain consumption level (e.g. documented by means of meter readings)
  - the physical effect must be implemented at the relevant RLM exit point(s) with effect from the same delivery start as agreed under the corresponding trade on the exchange



The above list is not exhaustive. Evidence should preferably be submitted in an electronic format that is compatible with standard software for further processing by the MAM.

**Please note:** If a trader becomes aware that it has failed to deliver a physical effect (for example due to IT failure), it is recommended to contact the MAM in whose market area the physical effect was to be caused.

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