

Welcome to Shippers' Forum

Jeppe Danø, 8 December 2016



Sikkerhed i Energinet.dk

Safety at Energinet.dk



Sikkerhedsguide Host



Nødudgange Emergency exit



Hjertestarter Defibrillator (AED)



Samlingssted *Meeting point*

Agenda



12-13	Lunch and networking
13:00	Welcome Jeppe Danø, Energinet.dk
13:15	Status on the Supply Situation Jess Bernt Jensen, Energinet.dk
13:25	Open Season status Christian Rutherford and Julie Frost Szpilman, Energinet.dk
13:45	Gas Market Development Stanislaw Brzeczkowski, GAZ-SYSTEM
14:05	Coffee break and networking
14:35	EU Security of Supply Regulation Karen Ørsted Pedersen, Danish Energy Agency
14:50	Gas Storage Denmark A/S
15:00	End of programme

Two method approvals in one week...

1. Trade windows during weekends & official holidays approved from 1 April 2017:

Afgørelse:

Sekretariatet for Energitilsynet skal meddele Energinet.dk, at:

Sekretariatet for Energitilsynet godkender Energinet.dk's anmeldte justering af den kommercielle balancemodel, jf. naturgasforsyningslovens § 36 a. stk. 1, og balancekoden i det hele.

Sekretariatet for Energitilsynet godkender, at:

- Energinet.dk ændrer handelsstrukturen i den kommercielle balancemodel for Energinet.dk's gulzonehandler, således at der på alle dage i året er ét kontinuerligt handelsvindue mellem kl. 9.00-18.00 og to handelsvinduer om

2. Automatic allocation of capacity when over-delivery at exit zone and BNG entry:

Afgørelse:

Sekretariatet for Energitilsynet skal meddele Energinet.dk, at:

 $Sek retariatet for \ Energitils yn et \ godkender \ Energinet. dk's \ anmeldte \ metodeelementer, if.\ naturgas for syningslovens \ \S \ 36 \ a.$

Sekretariatet for Energitilsynet godkender, at:

- Energinet.dk fjerner overleverancegebyret i Exitzonen og BNG entry
- Energinet.dk automatisk tildeler transportkunderne døgnkapacitet efter udgangen af hvert gasdøgn.



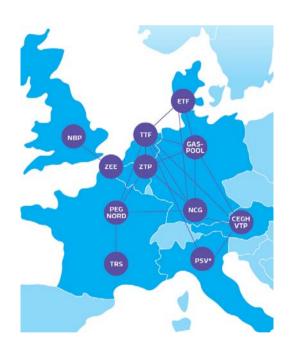
Expected change of the credit line procedure

- Today, the credit limit will usually be covered by a credit insurance taken out by Energinet.dk from external sources
- Energinet.dk has reassessed this setup and has found that the cost of a low level of insurance is high
- To have a satisfactory level of insurance would require a very expensive insurance even though the insurance would cover big and well-established companies
- Therefore, Energinet.dk will arrange for in-house insurance, reducing the cost, without increasing the risk
- <u>The same method</u> will be applied when considering credit lines for shippers, and maintaining the <u>same level</u> of service so that shippers will not experience any change in their credit line
- Energinet.dk will consult the market on this subject, by mail starting tomorrow and until 23 December 2016
- Change expected for spring 2017, subject to DERA approval





Succesful launch of Danish ETF products on November 17th



The Gaspoint Nordic ETF products was...

- Smoothly launched at the PEGAS platform on November 17th
- Alongside new locational spread products further connecting the German, Dutch and Danish gas markets

Well received by trading members

- All products traded at launch date including new spread offerings on spot and futures
- Nov-16 ETF trading (combined Gaspoint Nordic and PEGAS) has reached an all time monthly high of 2.641 GWh ☺

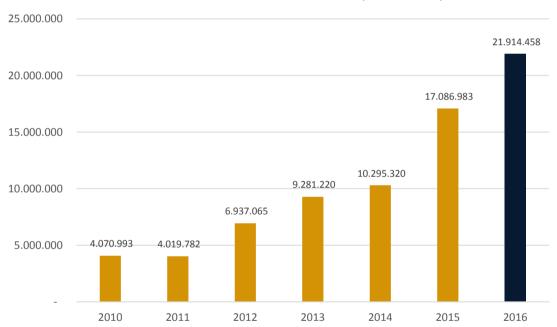
PEGAS offers a unique opportunity for the development and growth of Danish ETF through...

- A pan European approach to product/market development
- A diverse community of up to +200 trading members
- Additional futures products (beyond M+1) that can easily by listed
- Reduced technical and trading fees



Strong volume growth in year 2016





Tariff - 2017/2018

Gas Transmission





Cost base - Breakdown of OPEX and CAPEX

MDKK	Expected result 2018
Operational expenditure (OPEX):	2018
Personnel	101
Other operational costs*	96
OPEX Total	197
CAPEX:	
Depreciation	135
Financial costs (net)	55
CAPEX Total	190
Expenditure combined	387

^{*}Other operational costs include: "SOL" (System Operator Storage), external services and payment to DEA & DERA and taxes

NOTE: All information in relation to 2017/2018 tariffs are **indicative**. Reservation prices for the capacity auctions for 2017/2018 will be published February 2017.



Transmission tariffs 2017/2018 (indicative)

	Tariffs	Tariffs	Difference
	2016/2017	2017/2018	%
Transmission tariffs			
Entry capacity (DKK/kWh/h/year)	11.64	11.77	1%
Ellund	14.50	14.65	1%
Nybro, Dragør, BNG	9.30	9.27	0%
Exit capacity (DKK/kWh/h/year)	11.64	11.77	1%
Ellund, Nybro	9.30	9.27	0%
Exit zone, Dragør	13.04	13.06	0%
Volume (DKK/kWh)	0.00336	0.00381	13%

NOTE: All information in relation to 2017/2018 tariffs are **indicative**. Reservation prices for the capacity auctions for 2017/2018 will be published February 2017.



Transmission tariffs 2017/2018 (indicative)

Tariffs Difference



In this world nothing can be said to be certain, except death and taxes.

(Benjamin Franklin)

NOTE: All information in relation to 2017/2018 tariffs are **indicative**. Reservation prices for the capacity auctions for 2017/2018 will be published February 2017.

Asset Management

In the business unit Gas

Communication to external stakeholders



Klassificering:

12



Asset Management certificate

 Certification to the international Asset Management (AM) standard
 ISO55001:2014



We make **coherent** and **transparent** decisions and work **effectively** to secure **value** from our assets to **society** and to our **owner**.

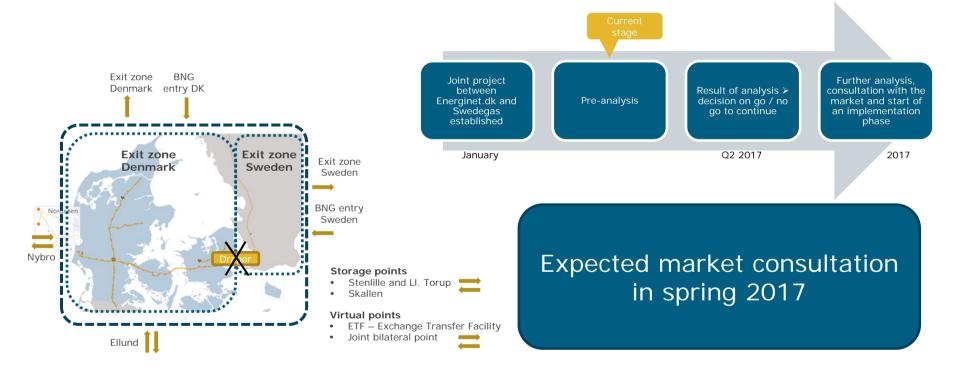
What are assets?

- Physical assets
- Market-based assets
- Data, IT systems, human resources and processes that integrate the above.



Joint balancing zone

- Status





PRISMA secondary trading



- Ellund capacity can be traded by the Shippers on the PRISMA secondary market
- > Currently, only <u>unbundled</u> capacity
- From January 2017, also <u>bundled</u> capacity



See you at E-world...



Status on the supply situation

Jess Bernt Jensen, 8 December 2016

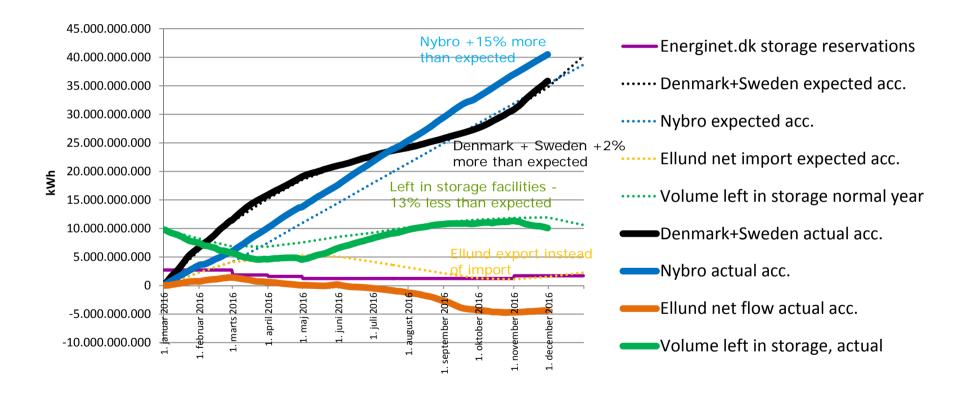


Klassificering:

17

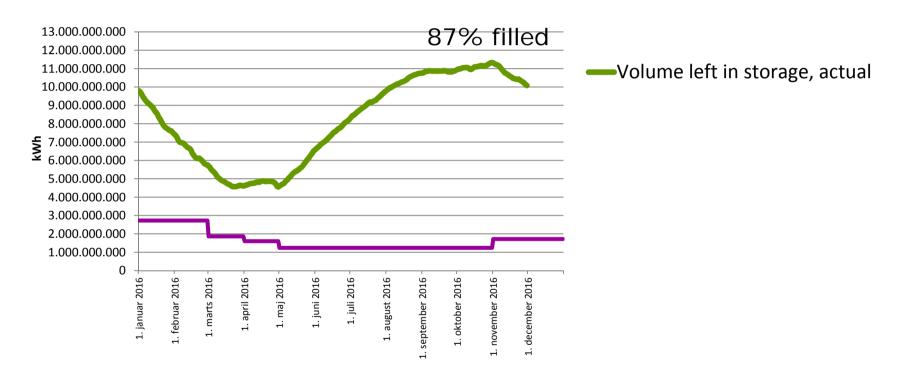


Status 1 december 2016



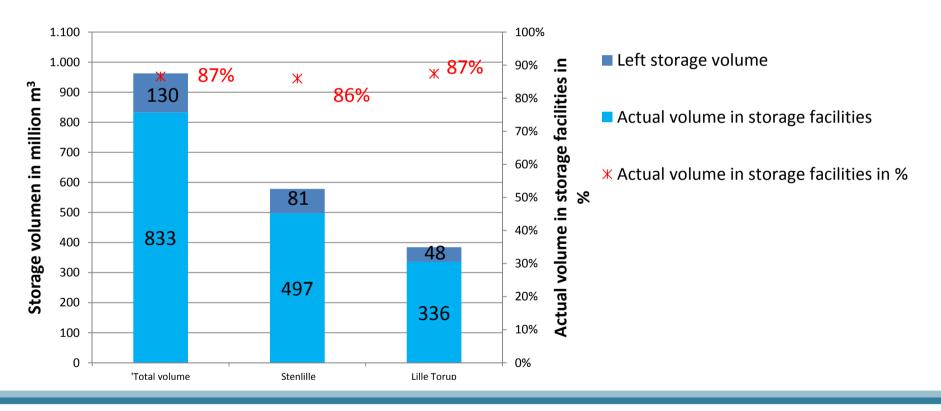


Left in storage facilities



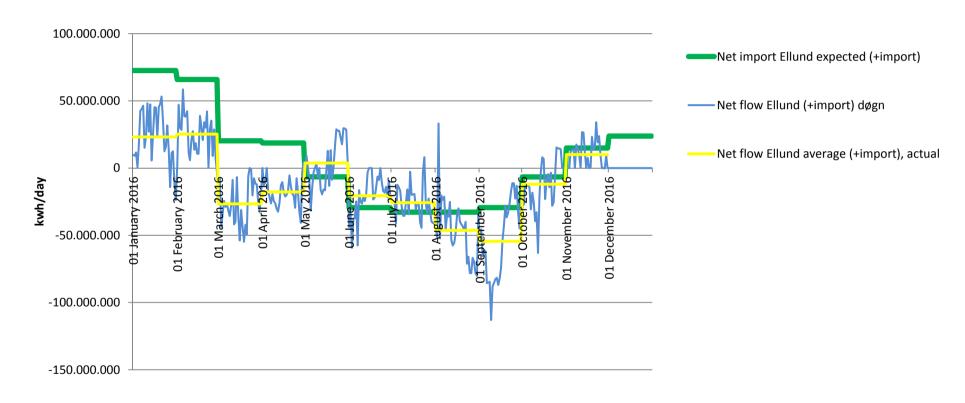


Left in storage facilities



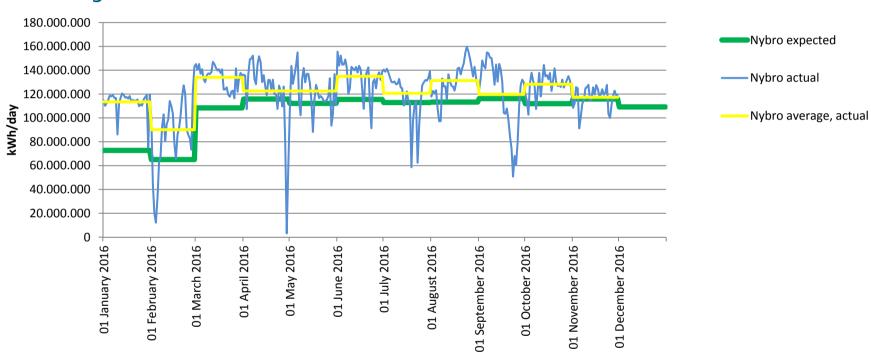


Ellund net flow





Nybro





Gas Security of Supply Report

High security of gas supply in Denmark

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http://www.energinet.dk/EN/OM-OS/Periodiske-rapporter/Sider/default.aspx

Open Season 2017

Julie Frost Szpilman and Christian Rutherford

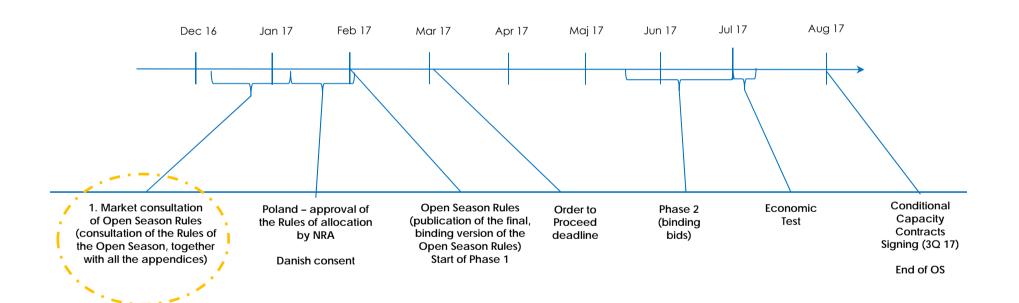


Klassificering:

24



Prospective overall timeline for Open Season





Open Season 2017 Rules

General Appendices:

Appendix 1: Phase 1 Order to Proceed Bid Form: North Sea Entry Point and

Interconnection Point Baltic Pipe

Appendix 2: Phase 2 Final Bid Form: North Sea Entry Point and Interconnection Point Baltic Pipe

Danish Appendices:

Appendix 3: Rules applicable to participation in the Danish part of the OS 2017

Appendix 3.A: Registration form

Appendix 3.B: Guarantee

Appendix 3.C: Draft of the OS 2017 Capacity Agreement

Appendix 3.D: Standard Framework Agreement (Appendix 2 of the Rules for Gas Transport)

Polish Appendices:

Appendix 4: Additional GAZ-SYSTEM's Rules for the Open Season 2017

Appendix 4.A: Transmission Network Code of GAZ-SYSTEM

Appendix 4.B: Tariff of GAZ-SYSTEM Appendix 4.C: Registration form

Appendix 4.D: Framework transmission contract template
Appendix 4.E: Draft of the OS 2017 Capacity Agreement



Model paper







Please visit our websites







Natural-gas market development in Poland





GAZ-SYSTEM S.A. Shippers' Forum Copenhagen, 8 December 2016



the system that connects

MAIN INFORMATION ON GAZ-SYSTEM S.A.

GAZ-SYSTEM IN NUMBERS*:

10.989 km

LENGHT OF TRANSMISSION NETWORK

684 km

LENGHT OF YAMAL-EUROPE PIELINE IN POLAND

893 GAS STATIONS

44 NODES

14 COMPRESSOR STATIONS

5 BCM/Y OF REGASIFICATION CAPACITY

100% SHARES HELD BY STATE TREASURY

*Infrastructure data as of 30 September 2016

KEY FACTS:

- Natural gas TSOs in Poland established in April 2004
- Fully unbundled company providing services on a non-discriminatory basis
- Certified operator of the transmission system and of the Yamal-Europe pipeline in Poland
- Operator of a virtual point in the transmission system in Poland
- Key integrator and facilitator of market development in the CEE and Baltic region
- Company committed to the liberalisation of the regional gas market
- Company operating, via its SPV, the LNG terminal in Świnoujście since June 2016

THE STRATEGY:

- SECURITY OF SUPPLY. Ensuring safe operations of the transmission system as part of the European gas network
- MARKET DEVELOPMENT. Creating optimum conditions for the development of a liberalised market in Poland
- EUROPEAN PARTNER. Strengthening the position of GAZ-SYSTEM as an integrator of the gas markets in the Baltic & CEE regions
- SUSTAINABILITY. Development of gas infrastructure to enable increased consumption of natural gas as an environmentally-friendly fuel



MAIN INFORMATION ON NATURAL GAS MARKET IN POLAND

MARKET IN NUMBERS:

180,8 TWh

VOLUME OF TRANSMITTED NATURAL GAS in 2015

159

TOTAL NUMBER OF SHIPPERS*

26

INTERNATIONAL SHIPPERS*

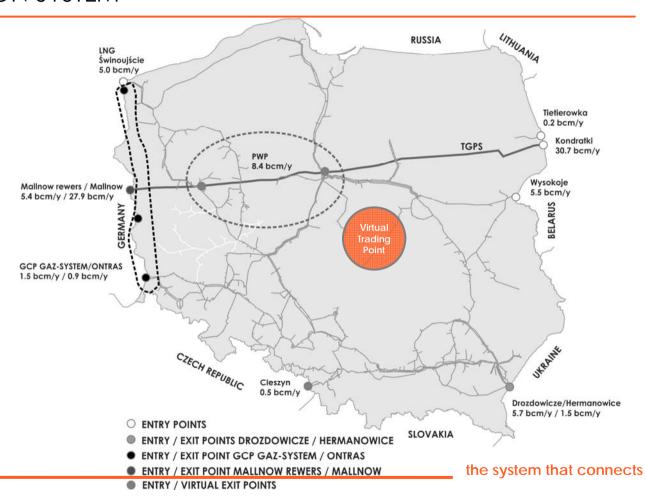
*Market data as of 2 December 2016

KEY FACTS:

- Entry Exit transport model
- ▶ 3 balancing zones:
 - ▶ H-gas
 - ▶ L-gas
 - ► TGPS (Yamal-Europa pipeline)
- ▶ EU Network codes implemented
 - ► CAM (capacity products, auctions)
 - ▶ BAL (nominations, gas exchange)
 - ▶ INT (AS4, Edig@s, quality information)
- ▶ WEB Page access to information
 - Contracts
 - Nominations
 - Reports
- ► Tariff model: "Post stamp" Entry Exit

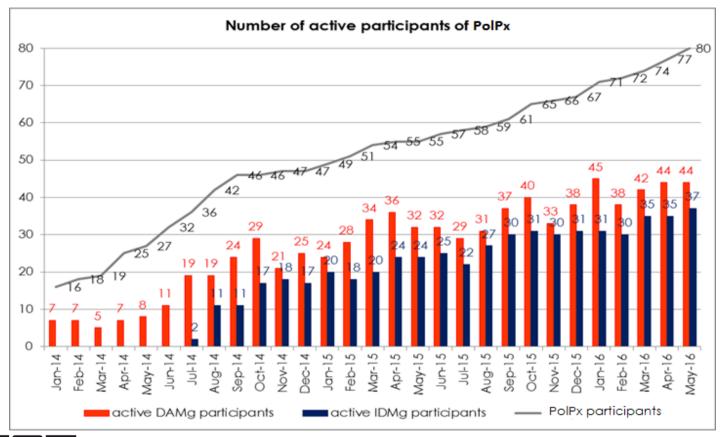


POLISH TRANSMISSION SYSTEM



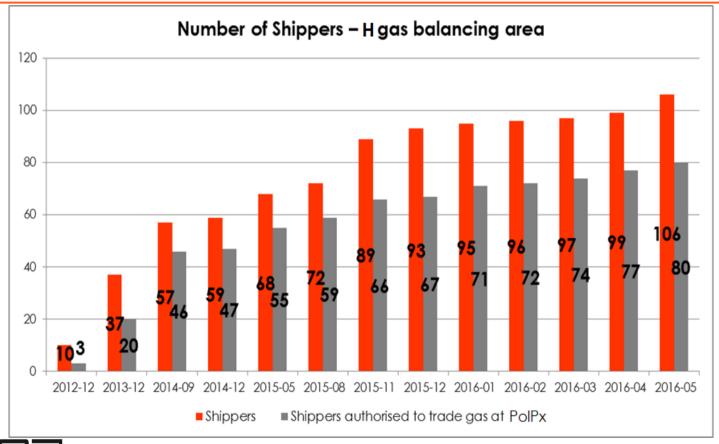


POLISH NATURAL GAS MARKET - PARTICIPANTS



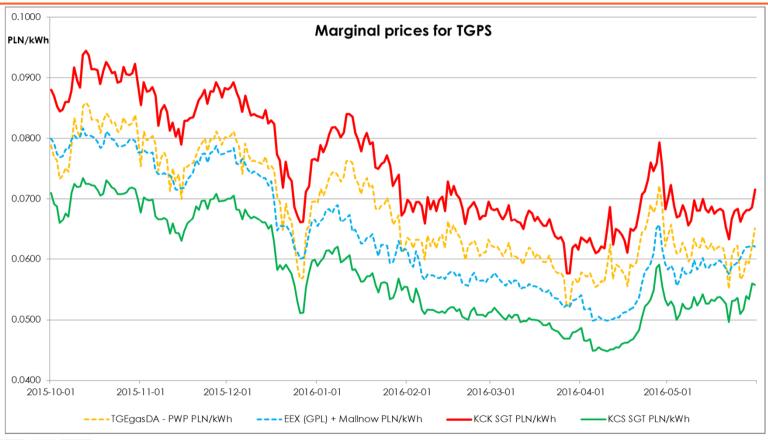


POLISH NATURAL GAS MARKET - SHIPPERS



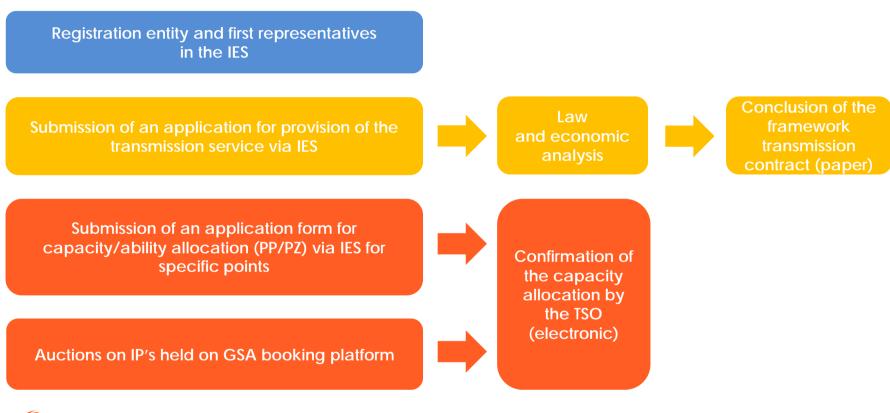


POLISH NATURAL GAS MARKET – PRICES



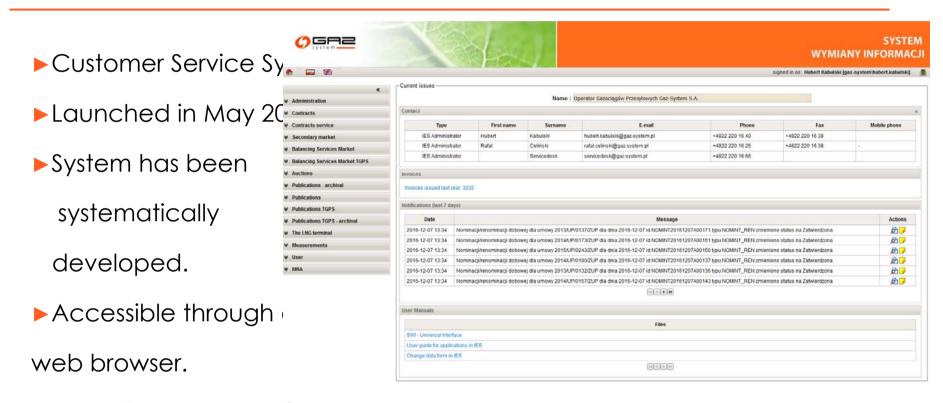


HOW TO BECOME A GAZ-SYSTEM SHIPPER?





INFORMATION EXCHANGE SYSTEM (IES)



► More than 1 700 active



INFORMATION EXCHANGE SYSTEM (IES)



Publication Zone, is the place where all the information required by 715/2009 Regulation are published.

Customer Zone, log-in required, provides access for the Shippers to all information and activities related to the transmission contracts and services.

Contract Database Zone, was developed for GAZ-SYSTEM employees as a source of all services provided by GAZ-SYSTEM



GSA CAPACITY BOOKING PLATFORM

- ▶ GAZ-SYSTEM Auctions is an CAM NC compliant
- ▶ July 2014 First capacity auctions were carried out on.
- ▶ GAZ-SYSTEM allocates all capacities on all IPs at GSA
- ► Conditions to take part in auctions held by GAZ-SYSTEM:

http://en.gaz-system.pl/auctions/auction-



- 3 Number of TSOs: (GAZ-SYSTEM, GAZ-SYSTEM ISO, Net4Gas)
- Pilot projects with Eustream and N4G, planned: UkrTransGAZ
- ▶ **59** Number of Shippers:
- 214 Number of users:
- ▶ 105 000 Number of auctions carried out (as of 2 Dec 2016)
- ▶ 17 Maximum number of participants in one auction
- ▶ 24 Maximum number of rounds (duration 8 days)
- Full range of CAM required products Y, Q, M, DA, WD
- Ongoing implementation of new CAM NC i.e. incremental capacity
- ▶ Secondary Market trade available





https://auctions.gaz-system.pl/test

Operators

We invite all of the new Transmission System Operators interested in cooperating with the GSA Platform to register.

Register»



Shippers

We invite all of the new Network Users interested in cooperating with the GSA Platform to register.

Register»

Sign in

Forgot your password?

Login

the system that connects

BALANCING - INTERIM MEASURES

Balancing platform

▶ A trading platform where the transmission system operator is a trading participant to all trades

Tolerance

- ▶ the level of which defines the maximum quantity of gas that can be bought or sold by each network user in the settlement of the imbalance at a weighted average price
- ▶ Time of application October 2015 September 2017 ?
- ▶ Tolerance is determined according to the following method:

$$DLN = \frac{5\% * MAX \left[\frac{(R_{PWE} + R_{PWY})}{2}; R_{PWY} \right];$$

where

R – means the quantities of gas delivered/offtaken, as appropriate, at Entry/Exit Points (excluding virtual entry/exit points – Gas Exchange, OTC, Balancing Services Market)

5 % is the current level of tolerance



COOPERATION WITH POLISH POWER EXCHANGE (POLPX)



- ► TGE makes it possible to sell and purchase gas on the gas exchange at prices fixed on market conditions and in keeping full confidentiality of the transaction
- Cooperation has started in 2011
- ▶ The TNC takes into consideration cooperation of the TSO with the Gas Exchange:
 - ▶ Transactions are realized at the Virtual Trading Point
 - ► The sale agreement concluded with the Gas Exchange is valid and effective between the parties and is realized by TSO
 - ▶ TGE is a partner in the nomination process







Thank you for your attention









the system that connect



Coffee break and networking

We meet again at 14:35





Revision of the Regulation concerning Measures to Safeguard the Security of Gas Supply

Status on the negotiations

From current to revised Regulation

- > 2010: Adoption of the current Regulation
- 2015: Strategy of the Energy Union
- 2016 (February): Commission's proposal for a revised Regulation

New elements in the revised version

- Enhanced regional cooperation (within predefined regions)
- New provision on solidarity
- Increased transparency in gas contracts

Deadlock in the negotiations

- From February 2016: Negotiations in EWP (no compromise)
- October 2016: Position of the European Parliament
- November 2016: Rejected mandate to open negotiations with European Parliament
- December 2016: Discussion between Ministers at the Energy Council (compromise found)

Danish positions at the Energy Council – 5 December 2016

Danish preferences are marked in red

- Regional cooperation: a) Predefined regions and jointly established plans or b) regional cooperation based on concrete risks and national plans?
- Solidarity: a) A uniform and fully harmonised solution or b) a more flexible mechanism (agreed on bilaterally)?
- Exchange of information on gas contracts: a) Notification of gas contracts exceeding 40 % of annual gas consumption or b) all/or minor contracts?

Conclusions of the Energy Council – 5 December 2016

...fortunately in line with the Danish preferences:

- Risk-based regional cooperation
- > The more flexible solidarity model
- Notification of contracts providing more than 40 % of annual consumption

What can be expected now?

- > Fifth revision December 2016
- > Trialogue with EP 2017
- ➤ Adoption in 2017?

Thank you for your time Questions?



STORAGE IN YOUR POCKET APP

SHIPPERS' FORUM 8 DECEMBER 2016



Why an app?

- You can check prices when you want to
- You can order storage products when you want to
- You can get a price overview of various products
- Not a substitute to direct contact and dialogue with us



Doc. No:" / "Date:" / "ID:



- First, use a login
- Login details will follow soon



Doc. No:" / "Date:" / "ID:



Choose flexibility by days for both injection and withdrawal

move the "slider" along the horisontal lines

you can choose a product within the range:

Injection: 170 - 30 days Withdrawal: 85 - 30 days

The total price is then shown when using 1 GWh volume capacity

If you choose "Compare", the product and total price will be shown in the top window

If you choose "Request", you will go to ordering the product



Doc. No:" / "Date:" / "ID:





You can compare up to 3 different products



Doc. No:" / "Date:" / "ID:



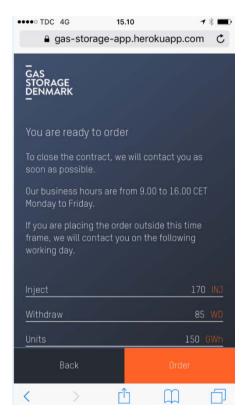
- You have now chosen the product's flexibility Example: 170/85 days
- Then you choose the volume Example: 150 GWh
- You can choose maximally 500 GWh
- Then press "Request"



■ Doc. No:" / "Date:" / "ID:



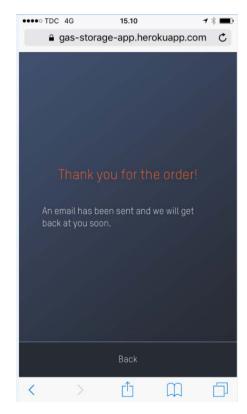
- You are now ready to order the chosen product
- Press "Order"
- We will be back as soon as possible within office hours
- Outside office hours, we will revert the next business day



Doc. No:" / "Date:" / "ID:



- You have now ordered the product
- We will accept the deal or reject the deal
- Please note that we may reject the deal if warranted, for example,
 - in consideration of low S/W spread
 - in consideration of our price risk → Sale is based on FCFS, but our strategy to distribute the sale over a period of time may require us to postpone the next deal
- Please note that you are always welcome to contact us direct by phone or email.



Doc. No:" / "Date:" / "ID:



Any questions or first-hand comments?

- We will send you a direct mail with details about the app
- We hope you will find it useful!





Save the dates: Shippers' Forum 2017:

9 March 2017

22 June 2017

7 September 2017

7 December 2017



We wish you a Merry Christmas and a Happy New Year ☺