

Powernext® Commodities

-

Market Notices

-

January 31 2019

CONTENTS

| | |
|--|-----------|
| TABLE OF MARKET NOTICES | 3 |
| POWERNEXT® COMMODITIES MARKET NOTICES..... | 9 |
| APPLICATION DOCUMENTS..... | 10 |
| PRICE COMMITTEE..... | 11 |
| RULES OF CONDUCT - DEFINITIONS..... | 12 |
| PEGAS SPOT MARKET NOTICES | 13 |
| PRODUCTS' AND SPREADS' SPECIFICATIONS | 14 |
| FEES, CHARGES, INVOICES, VAT | 30 |
| TRADING HOURS, BUSINESS DAYS AND TRADING CALENDARS..... | 33 |
| PARAMETERS SETTING NOTICE..... | 36 |
| METHODOLOGY FOR ESTABLISHING PEGAS SPOT EOD PRICE REFERENCES..... | 39 |
| METHODOLOGY FOR ESTABLISHING PEGAS SPOT REFERENCE PRICES..... | 46 |
| TRADE LIMITS ON PEGAS SPOT..... | 48 |
| AUCTION TRADING SESSION ON PEGAS CEGH VTP WITHIN-DAY..... | 50 |

TABLE OF MARKET NOTICES

| Market Notice | Date of publication | Entry into force | Contents |
|---------------------|---------------------|------------------|--|
| COMMODITIES-2008-02 | 13/11/2008 | 26/11/2008 | Powernext® Gas Spot / Parameters Setting Notice |
| COMMODITIES-2009-14 | 15/09/2009 | 24/09/2009 | Powernext® Gas Spot / Parameters Setting Notice |
| COMMODITIES-2009-15 | 15/09/2009 | 24/09/2009 | Powernext® Gas Spot / Methodology for establishing Powernext®Gas Spot EOD Price References |
| COMMODITIES-2009-20 | 23/11/2009 | 1/12/2009 | Deactivation of the Powernext® Balancing GRTgaz Market Segment |
| COMMODITIES-2010-06 | 26/03/2010 | 01/04/2010 | Closure of the Powernext® Balancing GRTgaz Market Segment |
| COMMODITIES-2010-13 | 30/04/2010 | 01/05/2010 | Powernext® Gas Spot / Parameters Setting Notice |
| COMMODITIES-2010-23 | 20/10/2010 | 21/10/2010 | Powernext® Gas Spot / Parameters Setting Notice |
| COMMODITIES-2010-24 | 20/10/2010 | 21/10/2010 | Powernext® Gas Spot / Methodology for establishing Powernext®Gas Spot EOD Price References |
| COMMODITIES-2010-26 | 25/11/2010 | 26/11/2010 | Powernext® Gas Spot / Parameters Setting Notice |
| COMMODITIES-2011-02 | 26/04/2011 | 27/04/2010 | Powernext® Gas Spot / Parameters Setting Notice (Update) |
| COMMODITIES-2011-05 | 16/05/2011 | 25/05/2011 | Powernext® Gas Spot / Parameters Setting Notice (Update) |
| COMMODITIES-2011-06 | 16/05/2011 | 25/05/2011 | Powernext® Gas Spot / Methodology for establishing Powernext® Gas Spot EOD Price References (Update) |
| COMMODITIES-2011-07 | 16/05/2011 | 25/05/2011 | Powernext® Gas Spot / Methodology for establishing Powernext®Gas Spot DAP Price References (Update) |
| COMMODITIES-2011-16 | 14/12/2011 | 15/12/2011 | Powernext® Gas Spot / Parameters Setting Notice |
| COMMODITIES-2011-17 | 14/12/2011 | 15/12/2011 | Powernext® Gas Spot / Methodology for establishing Powernext®Gas Spot EOD Price References (Update) |
| COMMODITIES-2011-19 | 21/12/2011 | 22/12/2012 | Powernext® Gas Spot / Parameters Setting Notice |
| COMMODITIES-2012-02 | 09/01/2012 | 10/01/2012 | Powernext® Energy Savings / Parameters Setting Notice |
| COMMODITIES-2012-08 | 22/05/2012 | 29/05/2012 | Powernext® Energy Savings / Modification of Powernext®Energy Savings Annex n°2 |
| COMMODITIES-2012-12 | 26/06/2012 | 03/07/2012 | Powernext® Gas Spot / Parameters Setting Notice |
| COMMODITIES-2012-13 | 26/06/2012 | 03/07/2012 | Powernext® Gas Spot / Methodology for establishing Powernext®Gas Spot EOD Price References (Update) |
| COMMODITIES-2012-21 | 25/09/2012 | 01/10/2012 | Powernext® Gas Spot / Methodology for establishing Powernext®Gas Spot EOD Price References (Update) |
| COMMODITIES-2012-26 | 10/12/2012 | 21/12/2012 | Powernext® Gas Spot / Parameters Setting Notice |
| COMMODITIES-2012-27 | 10/12/2012 | 21/12/2012 | Methodology for establishing Powernext® Gas Spot EOD Price References (Update) |
| COMMODITIES-2013-02 | 30/01/2013 | 01/02/2013 | Powernext® Gas Spot / Parameters Setting Notice |
| COMMODITIES-2013-03 | 30/01/2013 | 01/02/2013 | Powernext® Gas Spot / Methodology for establishing Powernext® Gas Spot EOD Price References (Update) |
| COMMODITIES-2013-12 | 01/08/2013 | 28/08/2013 | Powernext®Commodities / Application Documents |
| COMMODITIES-2013-13 | 01/08/2013 | 28/08/2013 | Powernext®Commodities / Price Committee |
| COMMODITIES-2013-14 | 01/08/2013 | 28/08/2013 | Powernext®Commodities / Rules of Conduct – Definitions |
| COMMODITIES-2013-15 | 01/08/2013 | 28/08/2013 | Powernext®Commodities / Technical provisions |
| COMMODITIES-2013-16 | 01/08/2013 | 28/08/2013 | Powernext®Gas Spot / Products and Spreads between Products Specifications |
| COMMODITIES-2013-17 | 01/08/2013 | 28/08/2013 | Powernext®Gas Spot / Fees, charges, invoices, VAT |
| COMMODITIES-2013-18 | 01/08/2013 | 28/08/2013 | Powernext®Gas Spot / Parameters setting notice |
| COMMODITIES-2013-19 | 01/08/2013 | 28/08/2013 | Powernext®Gas Spot / Methodology for establishing Powernext®Gas Spot EOD Price References |

| | | | |
|---------------------|------------|------------|---|
| COMMODITIES-2013-20 | 01/08/2013 | 28/08/2013 | Powernext®Gas Spot / Methodology for establishing Powernext®Gas Spot DAP Price References |
| COMMODITIES-2013-21 | 01/08/2013 | 28/08/2013 | Powernext®Energy Savings / CEE Product Specifications |
| COMMODITIES-2013-22 | 01/08/2013 | 28/08/2013 | Powernext®Energy Savings / Fees, charges, invoices, VAT for Powernext SA services |
| COMMODITIES-2013-23 | 01/08/2013 | 28/08/2013 | Powernext®Energy Savings / Self-billing mandate for CEE sales |
| COMMODITIES-2013-24 | 01/08/2013 | 28/08/2013 | Powernext®Energy Savings / Parameters setting notice |
| COMMODITIES-2013-25 | 09/08/2013 | 12/08/2013 | Powernext®Gas Spot / Methodology for establishing Powernext®Gas Spot EOD Price References |
| COMMODITIES-2013-26 | 27/08/2013 | 28/08/2013 | Powernext®Gas Spot / Products and Spreads between Products Specifications |
| COMMODITIES-2013-29 | 22/11/2013 | 28/11/2013 | Powernext®Gas Spot / Products and Spreads between Products Specifications |
| COMMODITIES-2013-30 | 22/11/2013 | 28/11/2013 | Powernext®Gas Spot / Methodology for establishing Powernext®Gas Spot EOD Price References |
| COMMODITIES-2013-31 | 22/11/2013 | 28/11/2013 | Powernext®Gas Spot / Methodology for establishing Powernext®Gas Spot DAP Price References |
| COMMODITIES-2013-33 | 20/12/2013 | 23/12/2013 | Powernext®Gas Spot / Parameters setting notice |
| COMMODITIES-2014-02 | 24/01/2014 | 27/01/2014 | Powernext®Gas Spot / Products and Spreads between Products Specifications |
| COMMODITIES-2014-05 | 30/04/2014 | 01/05/2014 | Powernext®Gas Spot / Fees, charges, invoices, VAT |
| COMMODITIES-2014-12 | 07/07/2014 | 09/07/2014 | Powernext®Gas Spot / Technical Provisions |
| COMMODITIES-2014-13 | 07/07/2014 | 09/07/2014 | Powernext®Gas Spot / Products and Spreads between Products Specifications |
| COMMODITIES-2014-14 | 07/07/2014 | 09/07/2014 | Powernext®Gas Spot / Fees, charges, invoices, VAT |
| COMMODITIES-2014-15 | 07/07/2014 | 09/07/2014 | Powernext®Gas Spot / Business days and calendars |
| COMMODITIES-2014-16 | 07/07/2014 | 09/07/2014 | Powernext®Gas Spot / Parameters setting notice |
| COMMODITIES-2014-17 | 07/07/2014 | 09/07/2014 | Powernext®Gas Spot / Methodology for establishing Powernext®Gas Spot EOD Price References |
| COMMODITIES-2014-27 | 17/12/2014 | 01/01/2015 | Powernext® Commodities / Membership documents |
| COMMODITIES-2014-28 | 17/12/2014 | 01/01/2015 | Powernext® Commodities / Price Committee |
| COMMODITIES-2014-29 | 17/12/2014 | 01/01/2015 | PEGAS Spot / Products and Spreads between Products Specifications |
| COMMODITIES-2014-30 | 17/12/2014 | 01/01/2015 | PEGAS Spot / Fees, charges, invoices, VAT |
| COMMODITIES-2014-31 | 17/12/2014 | 01/01/2015 | PEGAS Spot / Trading Hours, Business Days and Calendars |
| COMMODITIES-2014-32 | 17/12/2014 | 01/01/2015 | PEGAS Spot / Parameters setting notice |
| COMMODITIES-2014-33 | 17/12/2014 | 01/01/2015 | PEGAS Spot / Methodology for establishing PEGAS Spot EOD Price References |
| COMMODITIES-2014-34 | 17/12/2014 | 01/01/2015 | PEGAS Spot / Methodology for establishing PEGAS Price References |
| COMMODITIES-2015-08 | 25/03/2015 | 26/03/2015 | PEGAS Spot / Products and Spreads between Products Specifications |
| COMMODITIES-2015-09 | 25/03/2015 | 26/03/2015 | PEGAS Spot / Fees, charges, invoices, VAT |
| COMMODITIES-2015-10 | 25/03/2015 | 26/03/2015 | PEGAS Spot / Trading Hours, Business Days and Calendars |
| COMMODITIES-2015-11 | 25/03/2015 | 26/03/2015 | PEGAS Spot / Parameters setting notice |
| COMMODITIES-2015-12 | 25/03/2015 | 26/03/2015 | PEGAS Spot / Methodology for establishing PEGAS Spot EOD Price References |
| COMMODITIES-2015-13 | 25/03/2015 | 26/03/2015 | PEGAS Spot / Methodology for establishing PEGAS Price References |
| COMMODITIES-2015-19 | 04/05/2015 | 05/05/2015 | PEGAS Spot / Trade Limits on PEGAS Spot |
| COMMODITIES-2015-29 | 25/09/2015 | 01/10/2015 | PEGAS Spot / Products and Spreads between Products Specifications |
| COMMODITIES-2015-36 | 13/11/2015 | 17/11/2015 | PEGAS Spot / Products and Spreads between Products Specifications (Locational Products) |
| COMMODITIES-2015-37 | 13/11/2015 | 17/11/2015 | PEGAS Spot / Fees, charges, invoices, VAT (Locational Products) |
| COMMODITIES-2015-41 | 23/12/2015 | 01/01/2016 | PEGAS Spot / Fees, charges, invoices, VAT (new price list) |
| COMMODITIES-2015-42 | 23/12/2015 | 01/01/2016 | PEGAS Spot / Trading Hours, Business Days and Calendars (2016 calendars) |
| COMMODITIES-2015-43 | 23/12/2015 | 01/01/2016 | PEGAS Spot / Parameters setting notice (precisions) |
| COMMODITIES-2015-44 | 23/12/2015 | 01/01/2016 | PEGAS Spot / Methodology for establishing PEGAS Spot EOD Price References (precisions) |

| | | | |
|---------------------|-------------|------------|--|
| COMMODITIES-2016-06 | 24/03/2016 | 30/03/2016 | PEGAS Spot / Products and Spreads between Products Specifications (Locational and hourly Products) |
| COMMODITIES-2016-07 | 24/03/2016 | 30/03/2016 | PEGAS Spot / Fees, charges, invoices, VAT (Locational and hourly Products) |
| COMMODITIES-2016-08 | 24/03/2016 | 30/03/2016 | PEGAS Spot / Trading Hours, Business Days and Calendars (Hourly products) |
| COMMODITIES-2016-09 | 24/03/2016 | 30/03/2016 | PEGAS Spot / Parameters setting notice (Hourly products) |
| COMMODITIES-2016-21 | 28/06/2016 | 01/07/2016 | Powernext® Commodities / Application documents (References) |
| COMMODITIES-2016-22 | 28/06/2016 | 01/07/2016 | Powernext® Commodities / Price Committee (References) |
| COMMODITIES-2016-23 | 28/06/2016 | 01/07/2016 | Powernext® Commodities / Rules of Conduct – Definitions (References) |
| COMMODITIES-2016-24 | 28/06/2016 | 01/07/2016 | Powernext® Commodities / Off-Order Book interest registration (trade registration) systems |
| COMMODITIES-2016-25 | 28/06/2016 | 01/07/2016 | PEGAS Spot / Fees, charges, invoices, VAT (Introduction of Regulated market and Non-MTF notions) |
| COMMODITIES-2016-26 | 28/06/2016 | 01/07/2016 | PEGAS Spot / Trading hours, Business days and Trading calendars (References) |
| COMMODITIES-2016-27 | 28/06/2016 | 01/07/2016 | PEGAS Non-MTF / Contracts and spreads between contracts' specifications (Non-MTF Products) |
| COMMODITIES-2016-28 | 28/06/2016 | 01/07/2016 | PEGAS Non-MTF / Fees, charges, invoices, VAT (Introduction of Regulated market and Non-MTF notions) |
| COMMODITIES-2016-29 | 28/06/2016 | 01/07/2016 | PEGAS Non-MTF / Parameters and Technical Provisions (Non-MTF Products) |
| COMMODITIES-2016-30 | 28/06/2016 | 01/07/2016 | PEGAS Non-MTF / Closing Price Methodology (Non-MTF Products) |
| COMMODITIES-2016-31 | 28/06/2016 | 01/07/2016 | PEGAS Non-MTF / Trading hours, Business days and Contracts Calendars (Non-MTF Products) |
| COMMODITIES-2016-54 | 19/09/2016 | 22/09/2016 | PEGAS Spot / Fees, charges, invoices, VAT (Update on VAT rules) |
| COMMODITIES-2016-55 | 19/09/2016 | 22/09/2016 | PEGAS Spot / Trading Hours, Business Days and Calendars (Modification of Spreads between Products trading hours) |
| COMMODITIES-2016-56 | 19/09/2016 | 22/09/2016 | PEGAS Non-MTF / Fees, charges, invoices, VAT (Update on VAT rules) |
| COMMODITIES-2016-75 | 16/11//2016 | 17/11/2016 | PEGAS Spot / Contracts and spreads between contracts' specifications (Opening of the ETF hub) |
| COMMODITIES-2016-76 | 16/11//2016 | 17/11/2016 | PEGAS Spot / Fees, charges, invoices, VAT (Opening of the ETF hub) |
| COMMODITIES-2016-77 | 16/11//2016 | 17/11/2016 | PEGAS Spot / Trading hours, business days and trading calendars (modification of opening hours) |
| COMMODITIES-2016-78 | 16/11//2016 | 17/11/2016 | PEGAS Spot / Parameters setting notice (Opening of the ETF hub) |
| COMMODITIES-2016-79 | 16/11//2016 | 17/11/2016 | PEGAS Spot / Methodology for establishing PEGAS Spot EOD price references (Opening of the ETF hub) |
| COMMODITIES-2016-80 | 16/11//2016 | 17/11/2016 | PEGAS Spot / Methodology for establishing PEGAS Spot reference prices (Opening of the ETF hub) |
| COMMODITIES-2016-81 | 16/11//2016 | 17/11/2016 | PEGAS Non-MTF / Contracts and spreads between contracts' specifications (Opening of the ETF hub and of an additional maturity) |
| COMMODITIES-2016-82 | 16/11//2016 | 17/11/2016 | PEGAS Non-MTF / Fees, charges, invoices, VAT (Opening of the ETF hub) |
| COMMODITIES-2016-83 | 16/11//2016 | 17/11/2016 | PEGAS Non-MTF / Parameters setting notice (Opening of the ETF hub) |
| COMMODITIES-2016-84 | 16/11//2016 | 17/11/2016 | PEGAS Non-MTF / Closing Price Methodology (Opening of a new hub ETF, of an additional maturity and modification of the parameters of the closing price methodology on NCG and GASPOOL) |
| COMMODITIES-2016-85 | 16/11//2016 | 17/11/2016 | PEGAS Non-MTF / Trading hours, business days and trading calendars (Opening of a new hub ETF, modification of opening hours and addition of 2017 contracts) |
| COMMODITIES-2016-89 | 25/11/2016 | 01/12/2016 | PEGAS Spot / Contracts and spreads between contracts' specifications (Opening of the CEGH VTP hub) |
| COMMODITIES-2016-90 | 25/11/2016 | 01/12/2016 | PEGAS Spot / Fees, charges, invoices, VAT (Opening of the CEGH VTP hub) |
| COMMODITIES-2016-91 | 25/11/2016 | 01/12/2016 | PEGAS Spot / Parameters setting notice (Opening of the CEGH VTP hub) |
| COMMODITIES-2016-92 | 25/11/2016 | 01/12/2016 | PEGAS Spot / Methodology for establishing PEGAS Spot EOD price references (Opening of the CEGH VTP hub) |

| | | | |
|----------------------|------------|------------|--|
| COMMODITIES-2016-93 | 25/11/2016 | 01/12/2016 | PEGAS Spot / Methodology for establishing PEGAS Spot reference prices (Opening of the CEGH VTP hub) |
| COMMODITIES-2016-94 | 25/11/2016 | 01/12/2016 | PEGAS Spot / Trade limits on PEGAS Spot (Opening of the CEGH VTP hub) |
| COMMODITIES-2016-95 | 25/11/2016 | 01/12/2016 | PEGAS Spot/ Auction Trading Session on PEGAS CEGH VTP Within-Day (Opening of the CEGH VTP hub) |
| COMMODITIES-2016-96 | 25/11/2016 | 01/12/2016 | PEGAS Non-MTF / Contracts and spreads between contracts' specifications (Opening of the CEGH VTP hub) |
| COMMODITIES-2016-97 | 25/11/2016 | 01/12/2016 | PEGAS Non-MTF / Fees, charges, invoices, VAT (Opening of the CEGH VTP hub) |
| COMMODITIES-2016-98 | 25/11/2016 | 01/12/2016 | PEGAS Non-MTF / Parameters setting notice (Opening of the CEGH VTP hub) |
| COMMODITIES-2016-99 | 25/11/2016 | 01/12/2016 | PEGAS Non-MTF / Closing Price Methodology (Opening of a new hub CEGH VTP) |
| COMMODITIES-2016-100 | 25/11/2016 | 01/12/2016 | PEGAS Non-MTF / Trading hours, business days and trading calendars (Opening of a new hub CEGH VTP) |
| COMMODITIES-2016-107 | 23/12/2016 | 23/12/2016 | PEGAS Spot / Trading hours, business days and trading calendars (modification of some delivery dates) |
| COMMODITIES-2017-02 | 19/01/2017 | 24/01/2017 | PEGAS Spot / Methodology for establishing PEGAS Spot EOD price references (Integration of Synthetic Prices) |
| COMMODITIES-2017-03 | 19/01/2017 | 24/01/2017 | PEGAS Spot / Methodology for establishing PEGAS Spot reference prices references (Integration of Synthetic Prices) |
| COMMODITIES-2017-04 | 19/01/2017 | 24/01/2017 | PEGAS Non-MTF / Contracts and spreads between contracts' specifications (Integration of Spreads between Products of the same maturity) |
| COMMODITIES-2017-05 | 19/01/2017 | 24/01/2017 | PEGAS Non-MTF / Fees, charges, invoices, VAT (Trading fees on Spreads between Products of the same maturity) |
| COMMODITIES-2017-06 | 19/01/2017 | 24/01/2017 | PEGAS Non-MTF /Parameters and technical provisions (Removal of EGIX) |
| COMMODITIES-2017-07 | 19/01/2017 | 24/01/2017 | PEGAS Non-MTF / Closing Price Methodology (Integration of Synthetic Prices) |
| COMMODITIES-2017-08 | 19/01/2017 | 01/02/2017 | PEGAS Non-MTF / Fees, charges, invoices, VAT (Trading fees on Transactions resulting from Off-Order Book Interests) |
| COMMODITIES-2017-09 | 14/02/2017 | 14/02/2017 | PEGAS Spot / Trading hours, business days and trading calendars (modification of delivery dates) |
| COMMODITIES-2017-19 | 20/03/2017 | 22/03/2017 | PEGAS Non-MTF / Contracts and spreads between contracts' specifications (Modification of the Price Tick for Orderbook Interest) |
| COMMODITIES-2017-27 | 23/05/2017 | 31/05/2017 | Powernext® Commodities / Off-order book interest registration (trade registration) systems (Implementation of Trading Limits on OTC STP) |
| COMMODITIES-2017-42 | 05/09/2017 | 05/09/2017 | PEGAS Spot / Methodology for establishing PEGAS price references (Harmonization of indices) |
| COMMODITIES-2017-43 | 05/09/2017 | 05/09/2017 | PEGAS Spot / Methodology for establishing PEGAS Spot EOD price references (Harmonization of indices) |
| COMMODITIES-2017-44 | 05/09/2017 | 05/09/2017 | PEGAS Spot / Parameters setting notice (Harmonization of indices) |
| COMMODITIES-2017-45 | 05/09/2017 | 05/09/2017 | PEGAS Spot / Auction Trading Session on PEGAS CEGH VTP Within-Day (Harmonization of indices) |
| COMMODITIES-2017-54 | 03/11/2017 | 06/11/2017 | PEGAS Spot / Products' and Spreads' specifications: Modification of the current French locational products and introduction of the French Congestion Management Products (CMP). Modification of ZEE trading hours (turning 24/7) |

| | | | |
|---------------------|------------|------------|---|
| COMMODITIES-2017-55 | 03/11/2017 | 06/11/2017 | PEGAS Spot/ Fees, Charges, Invoices, VAT: Modification of the names of locational products and CMP. |
| COMMODITIES-2017-56 | 03/11/2017 | 06/11/2017 | PEGAS Spot/Trading Hours, Business Days And Trading Calendars: Modification of opening and trading hours. |
| COMMODITIES-2017-62 | 05/12/2017 | 08/12/2017 | PEGAS Spot / Contracts and spreads between contracts' specifications (Introduction of CZ VTP hub) |
| COMMODITIES-2017-63 | 05/12/2017 | 08/12/2017 | PEGAS Spot / Fees, charges, invoices, VAT (Introduction of CZ VTP hub) |
| COMMODITIES-2017-64 | 05/12/2017 | 08/12/2017 | PEGAS Spot / Trading hours, business days and trading calendars (Introduction of CZ VTP hub, addition of 2018 contracts) |
| COMMODITIES-2017-65 | 05/12/2017 | 08/12/2017 | PEGAS Spot / Parameters setting notice (Introduction of CZ VTP hub) |
| COMMODITIES-2017-66 | 05/12/2017 | 08/12/2017 | PEGAS Spot / Methodology for establishing PEGAS Spot EOD price references (Introduction of CZ VTP hub) |
| COMMODITIES-2017-67 | 05/12/2017 | 08/12/2017 | PEGAS Spot / Methodology for establishing PEGAS Spot reference prices (Introduction of CZ VTP hub) |
| COMMODITIES-2017-68 | 05/12/2017 | 08/12/2017 | PEGAS Non-MTF / Contracts and spreads between contracts' specifications (Introduction of CZ VTP hub, modification of eligible contracts, minimum lot sizes, volume ticks, maturities on Spread) |
| COMMODITIES-2017-69 | 05/12/2017 | 08/12/2017 | PEGAS Non-MTF / Fees, charges, invoices, VAT (Introduction of CZ VTP hub, modification of technical fees) |
| COMMODITIES-2017-70 | 05/12/2017 | 08/12/2017 | PEGAS Non-MTF /Parameters and technical provisions (Introduction of CZ VTP hub, configuration of licence and operating support) |
| COMMODITIES-2017-71 | 05/12/2017 | 08/12/2017 | PEGAS Non-MTF / Closing Price Methodology (Introduction of CZ VTP hub, definition of Closing Period, Methodology, List of contracts, steps of calculation of the closing prices) |
| COMMODITIES-2017-72 | 05/12/2017 | 08/12/2017 | PEGAS Non-MTF / Trading hours, business days and trading calendars (modification of trading hours/days) |
| COMMODITIES-2017-73 | 05/12/2017 | 08/12/2017 | PEGAS Non-MTF / Trading limits (System of Trading limits) |
| COMMODITIES-2017-74 | 05/12/2017 | 08/12/2017 | Powernext® Commodities / Off-order book interest registration (trade entry service) |
| COMMODITIES-2018-13 | 23/05/2018 | 28/05/2018 | Powernext® Commodities / Modification of Market Notices : Non-MTF and Registering brokerage deletion |
| COMMODITIES-2018-14 | 23/05/2018 | 28/05/2018 | PEGAS Spot / Modification of Market Notices : CMP/Locational Modification |
| COMMODITIES-2018-36 | 26/10/2018 | 01/11/2018 | PEGAS Spot / Contracts and spreads between contracts' specifications (French zone merger) |
| COMMODITIES-2018-37 | 26/10/2018 | 01/11/2018 | PEGAS Spot / Fees, charges, invoices, VAT (French zone merger) |
| COMMODITIES-2018-38 | 26/10/2018 | 01/11/2018 | PEGAS Spot / Parameters setting notice (French zone merger) |
| COMMODITIES-2018-39 | 26/10/2018 | 01/11/2018 | PEGAS Spot / Methodology for establishing PEGAS Spot EOD price references (French zone merger) |
| COMMODITIES-2018-40 | 26/10/2018 | 01/11/2018 | PEGAS Spot / Methodology for establishing PEGAS Spot reference prices (French zone merger) |
| COMMODITIES-2019-04 | 31/01/2019 | 31/01/2019 | PEGAS SPOT/ Products and spread specifications : terms of execution of orders on locational and CMP products for GRTgaz and Teréga |

| | | | |
|---------------------|------------|------------|--|
| COMMODITIES-2019-05 | 31/01/2019 | 31/01/2019 | PEGAS Spot / Trading hours, business days and trading calendars (modification of trading hours/days) |
|---------------------|------------|------------|--|

POWERNEXT® COMMODITIES MARKET NOTICES

POWERNEXT® COMMODITIES
Notice n° COMMODITIES-2018-13
28/05/2018

APPLICATION DOCUMENTS

POWERNEXT® COMMODITIES
Notice n° COMMODITIES-2016-21
28/06/2016

Pursuant to Article 1.2.1.1.5 and 1.2.1.1.6 of the Powernext® Commodities Market Rules, Applicants must provide the following documents in order to be admitted on Powernext® Commodities:

- the Know Your Customer (KYC) form, including direct and indirect shareholders and a description of the technical and human resources to be allocated to trading on Powernext® Commodities;
- identification form including about the Applicant (registered office address and VAT number);
- a list of the senior managers and other representatives with the power to sign all of the documents relating to market operations and contracts (authorised signatures);
- a copy of the annual report, company registration, articles of association and the senior managers' powers, prepared in accordance with the legislation of the Applicant's home country.

PRICE COMMITTEE

POWERNEXT® COMMODITIES
Notice n° COMMODITIES-2016-22
28/06/2016

Pursuant to Article 1.6.5 of the Powernext® Commodities Market Rules, Powernext SAS hereby publishes the procedures for designating members of the Price Committee and the functioning of the Price Committee:

- Any Member may be contacted by Powernext SAS to participate to a Price Committee, in order to provide either price or bid ask spread;
- Except under exceptional circumstances, at least three Members are contacted by phone, or by any other mean, and at least two answers from Members are necessary for the Price Committee to be valid;
- Powernext SAS carries out the average of the price information provided by the Price Committee and reserves the right to exclude the highest and lowest prices given.

Price Committees can be organized, inter alia, in the following circumstances:

- Determination of the Price References as defined in the Market Notice Price References Methodology;
- Determination of the Price References in case of Transaction cancellation.

RULES OF CONDUCT - DEFINITIONS

POWERNEXT® COMMODITIES Notice n° COMMODITIES-2016-23 28/06/2016

Pursuant to Article 1.2.3.2 of the Powernext® Commodities Market Rules, Powernext SAS hereby publishes the definitions of the terms « attempted market manipulation », « market manipulation » and « inside information ».

« Attempted market manipulation » means:

(i) entering into any Transaction, issuing any Order to trade or taking any other action relating to a Product with the intention of:

giving false or misleading signals as to the supply of, demand for, or price of Products;

securing the price of one or several Products at an artificial level, unless the person who entered into the Transaction or issued the Order to trade establishes that his reasons for doing so are legitimate and that Transaction or Order to trade conforms to accepted market practices on Powernext® Commodities; or

employing a fictitious device or any other form of deception or contrivance which gives, or is likely to give, false or misleading signals regarding the supply of, demand for, or price of Products ;

or

(ii) disseminating information through the media, including the internet, or by any other means with the intention of giving false or misleading signals as to the supply of, demand for, or price of Products.

« market manipulation » means:

(i) entering into any Transaction or issuing any Order to trade a Product which:

gives, or is likely to give, false or misleading signals as to the supply of, demand for, or price of Products;

secures or attempts to secure, by a person, or persons acting in collaboration, the price of one or several Products at an artificial level, unless the person who entered into the Transaction or issued the Order to trade establishes that his reasons for doing so are legitimate and that that Transaction or Order to trade conforms to accepted market practices on Powernext® Commodities; or

employs or attempts to employ a fictitious device or any other form of deception or contrivance which gives, or is likely to give, false or misleading signals regarding the supply of, demand for, or price of Products ;

or

(ii) disseminating information through the media, including the internet, or by any other means, which gives, or is likely to give, false or misleading signals as to the supply of, demand for, or price of Products, including the dissemination of rumours and false or misleading news, where the disseminating person knew, or ought to have known, that the information was false or misleading.

« Inside information » means information of a precise nature which has not been made public, which relates, directly or indirectly, to one or more Products and which, if it were made public, would be likely to significantly affect the prices of those Products.

PEGAS SPOT MARKET NOTICES

PRODUCTS' AND SPREADS' SPECIFICATIONS

POWERNEXT® COMMODITIES / PEGAS Spot

Notice n° COMMODITIES-2019-04

31/01/2019

1 – Tradable Products on the French delivery areas

| Segment | PEGAS SPOT |
|--------------------------------------|--|
| Name of the Products | PEGAS Spot PEG |
| Delivery (virtual points) | PEG (GRTgaz and Teréga) |
| Tradable Products | WD (Within Day) DA (Day-Ahead) WE (Week-End) SAT (Saturday) SUN (Sunday) BH (Bank Holiday) ID (Individual Day) |
| Underlying | High calorific natural gas (H-gas quality) at 25°C |
| Negative prices | Negative Prices not allowed. |
| Contract Volumes units | MWh/day |
| Contract volume | 1 MWh/day |
| Minimum lot size | 240 contracts (i.e. Min Volume = 240 MWh/day) |
| Volume tick | 10 contracts (i.e. Volume Tick = 10 MWh/day) |
| Price unit | €/MWh, 3 decimal digits |
| Price tick | 0.025 €/MWh |
| Total Contract Volume | = Number of contracts x Contract volume (1 MWh/day) x Number of delivery days |
| Transformation for clearing purposes | Immediately after the conclusion of the trade, each WE and BH contract are replaced by corresponding daily contracts so the covered delivery period remains the same. |
| Delivery | All contracts are physical contracts and lead to physical deliveries on the specified virtual point. Delivery occurs each calendar day of the delivery period. For a given day D of the delivery period, the delivery goes from 06:00 a.m. CET of day D to 06:00 a.m. CET of day D+1. |

| Segment | PEGAS SPOT |
|--------------------------------------|--|
| Name of the Products | PEGAS Spot PEG 1 MWh/d |
| Delivery(virtual points) | PEG (GRTgaz and Teréga) |
| Tradable Products | WD (Within Day) DA (Day-Ahead) WE (Week-End) SAT (Saturday) SUN (Sunday) BH (Bank Holiday) ID (Individual Day) |
| Underlying | High calorific natural gas (H-gas quality) at 25°C |
| Negative prices | Negative Prices not allowed. |
| Contract Volumes units | MWh/day |
| Contract volume | 1 MWh/day |
| Minimum lot size | 1 contract (i.e. Min Volume = 1 MWh/day) |
| Volume tick | 1 contract (i.e. Volume Tick = 1 MWh/day) |
| Price unit | €/MWh, 3 decimal digits |
| Price tick | 0.025 €/MWh |
| Total Contract Volume | = Number of contracts x Contract volume (1 MWh/day) x Number of delivery days |
| Transformation for clearing purposes | Immediately after the conclusion of the trade, each WE and BH contract are replaced by corresponding daily contracts so the covered delivery period remains the same. |
| Delivery | All contracts are physical contracts and lead to physical deliveries on the specified virtual point. Delivery occurs each calendar day of the delivery period. For a given day D of the delivery period, the delivery goes from 06:00 a.m. CET of day D to 06:00 a.m. CET of day D+1. |

| Segment | PEGAS SPOT |
|--------------------------------------|--|
| Name of the Products | PEGAS Spot GRTgaz Teréga PEG |
| Delivery (virtual points) | PEG (GRTgaz and Teréga) |
| Tradable Products | WD (Within Day) DA (Day-Ahead) WE (Week-End) SAT (Saturday) SUN (Sunday) BH (Bank Holiday) ID (Individual Day) |
| Underlying | High calorific natural gas (H-gas quality) at 25°C |
| Negative prices | Negative Prices not allowed. |
| Contract Volumes units | MWh/day |
| Contract volume | 1 MWh/day |
| Minimum lot size | 1 contracts (i.e. Min Volume = 1 MWh/day) |
| Volume tick | 1 contracts (i.e. Volume Tick = 1 MWh/day) |
| Price unit | €/MWh, 3 decimal digits |
| Price tick | 0.025 €/MWh |
| Total Contract Volume | = Number of contracts x Contract volume (1 MWh/day) x Number of delivery days |
| Terms of execution | For these Products, only the Transmission System Operators (GRTgaz and Teréga) can aggress the orders inserted by other Members. |
| Transformation for clearing purposes | Immediately after the conclusion of the trade, each WE and BH contract are replaced by corresponding daily contracts so the covered delivery period remains the same. |
| Delivery | <p>For these Products, all trades lead to physical Delivery, but special rules apply regarding the Delivery.</p> <p>If the trade is done outside of the period of time corresponding to a consultation triggered by GRTgaz or Teréga, Market Participants have no specific obligation, and the trade is simply nominated by ECC on the virtual point, following regular processes.</p> <p>However, if the trade is done during the period of time corresponding to a consultation triggered by GRTgaz or Teréga, then specific procedures apply:</p> <ul style="list-style-type: none"> - A standard nomination will be performed by ECC on the virtual point following regular processes - However, on top of that, Market Participants have to comply with specific obligations towards GRTgaz and Teréga, including obligations, themselves or via a third party shipping entity from the same group, to notify the respective TSO by e-mail and obligation to renominate within certain deadlines on one or several of the physical points listed by the respective TSO in its notification initiating the consultation. <p>The period of time corresponding to a consultation is of one hour. Its starts when the e-mail is sent by the TSO triggering the consultation.</p> <p>Delivery occurs each calendar day of the delivery period. For a given day D of the delivery period, the delivery goes from 06:00 a.m. CET of day D to 06:00 a.m. CET of day D+1. Taking into account the specificities of these Products, Powernext SAS may occasionally have to disclose information relating to a given Trade to GRTgaz, upon its request. Such disclosure is made in accordance with article 1.2.5.6 of the Powernext® Commodities Market Rules.</p> |

| | |
|---|--|
| Segment | PEGAS SPOT |
| Name of the Products | PEGAS Spot GRTgaz Teréga PEG Downstream |
| Delivery (virtual points) | PEG (GRTgaz and Teréga) |
| Tradable Products | WD (Within Day) |
| Underlying | High calorific natural gas (H-gas quality) at 25°C |
| Negative prices | Negative Prices not allowed. |
| Contract Volumes units | MWh/day |
| Contract volume | 1 MWh/day |
| Minimum lot size | 1 contracts (i.e. Min Volume = 1 MWh/day) |
| Volume tick | 1 contracts (i.e. Volume Tick = 1 MWh/day) |
| Price unit | €/MWh, 3 decimal digits |
| Price tick | 0.025 €/MWh |
| Total Contract Volume | = Number of contracts x Contract volume (1 MWh/day) x Number of delivery days |
| Terms of execution | For these Products, only the Transmission System Operators (GRTgaz and Teréga) can aggress the orders inserted by other Members. |
| Transformation for clearing purposes | Immediately after the conclusion of the trade |
| Delivery | <p>For these Products, all trades lead to physical Delivery, but special rules apply regarding the Delivery.</p> <p>If the trade is done outside of the period of time corresponding to a consultation triggered by GRTgaz or Teréga, Market Participants have no specific obligation, and the trade is simply nominated by ECC on the virtual point, following regular processes.</p> <p>However, if the trade is done during the period of time corresponding to a consultation triggered by GRTgaz or Teréga, then specific procedures apply:</p> <ul style="list-style-type: none"> - A standard nomination will be performed by ECC on the virtual point following regular processes - However, on top of that, Market Participants have to comply with specific obligations towards GRTgaz and Teréga, including obligations, themselves or via a third party shipping entity from the same group, to notify the respective TSO by e-mail and obligation to renominate within certain deadlines on one or several of the physical points listed by the respective TSO in its notification initiating the consultation. <p>The period of time corresponding to a consultation is of one hour. Its starts when the e-mail is sent by the TSO triggering the consultation.</p> <p>Delivery occurs each calendar day of the delivery period.</p> <p>For a given day D of the delivery period, the delivery goes from 06:00 a.m CET of day D to 06:00 a.m. CET of day D+1.</p> <p>Taking into account the specificities of these Products, Powernext SAS may occasionally have to disclose information relating to a given Trade to the TSO, upon its request. Such disclosure is made in accordance with article 1.2.5.6 of the Powernext® Commodities Market Rules.</p> |

2 – Tradable Products on the Belgian delivery area

| Segment | PEGAS SPOT | |
|---|---|------------------|
| Name of the Products | PEGAS Spot ZTP | PEGAS Spot ZTP L |
| Delivery (virtual points) | ZTP (Fluxys) | ZTP L (Fluxys) |
| Tradable Products | WD (Within Day) DA (Day-Ahead) WE (Week-End) SAT (Saturday) SUN (Sunday) BH (Bank Holiday) ID (Individual Day) | |
| Underlying | ZTP: High calorific natural gas (H-gas quality) ZTP L: Low calorific natural gas (L-gas quality) | |
| Negative prices | Negative Prices not allowed. | |
| Contract Volumes units | MW | |
| Contract volume | 1 MW | |
| Minimum lot size | 1 contract (i.e. Min Volume = 1 MW) | |
| Volume tick | 1 contract (i.e. Volume Tick = 1 MW) | |
| Price unit | €/MWh, 3 decimal digits | |
| Price tick | 0.025 €/MWh | |
| Total Contract Volume | = Number of contracts x Contract volume (1 MW) x Number of delivery hours of the Contract (taking into account summer/winter time-shift) | |
| Transformation for clearing purposes | Immediately after the conclusion of the trade, each WE and BH contract are replaced by corresponding daily contracts so the covered delivery period remains the same. | |
| Delivery | All contracts are physical contracts and lead to physical deliveries on the specified virtual point. Delivery occurs each calendar day of the delivery period. For a given day D of the delivery period, the delivery goes from 06:00 a.m. CET of day D to 06:00 a.m. CET of day D+1. | |

| Segment | PEGAS SPOT | |
|---|--|--|
| Name of the Products | PEGAS Spot ZEE | |
| Delivery (virtual points) | ZEE (Fluxys) | |
| Tradable Products | WD (Within Day) DA (Day-Ahead) WE (Week-End) SAT (Saturday) SUN (Sunday) BH (Bank Holiday) ID (Individual Day) | |
| Underlying | Natural gas at the conditions of the TSO of the concerned delivery area | |
| Negative prices | Negative Prices not allowed. | |
| Contract Volumes units | Kilotherms per day (kth/d) (1 therm = 29.3071 kilowatt hours) | |
| Contract volume | 1 kth/d or 1,000 therms/day | |
| Minimum lot size | 1 contract (i.e. Min Volume = 1,000 therms/day) for Orders in the Order Book | |
| Volume tick | 1 contract (i.e. Min Volume = 1,000 therms/day) for Orders in the Order Book | |
| Price unit | GBP pence/therm (p/th), 3 decimal digits | |
| Price tick | GBP 0.005 p/th for Orders in the Order Book | |
| Total Contract Volume | = Number of contracts x Contract volume (1,000 therms/day) x Number of delivery days of the Contract | |
| Transformation for clearing purposes | Immediately after the conclusion of the trade, each WE and BH contract are replaced by the corresponding daily contracts so the covered delivery period remains the same. | |
| Delivery | All contracts are physical contracts and lead to physical deliveries on the specified physical point. Delivery occurs each calendar day of the delivery period. For a given day D of the delivery period, the delivery goes from 06:00 a.m. CET of day D to 06:00 a.m. CET of day D+1. | |

3 – Tradable Products on the German delivery areas

| Segment | PEGAS SPOT | | |
|--------------------------------------|---|----------------------|--|
| | PEGAS Spot NCG | PEGAS Spot NCG-L* | PEGAS Spot NCG-H* |
| Delivery (virtual points) | NCG (NetConnect Germany) | | |
| Tradable Products | WD (Within Day) DA (Day-Ahead) WE (Week-End) SAT (Saturday) SUN (Sunday) BH (Bank Holiday) ID (Individual Day) HR (Hourly) | | WD (Within Day) DA (Day-Ahead) WE (Week-End) SAT (Saturday) SUN (Sunday) BH (Bank Holiday) ID (Individual Day) |
| Underlying | NCG: natural gas regardless of gas quality (L or H) NCG H: High calorific natural gas (H-gas quality) NCG L: Low calorific natural gas (L-gas quality) | | |
| Negative prices | Negative Prices not allowed. | | |
| Contract Volumes units | MW | | |
| Contract volume | 1 MW | | |
| Minimum lot size | 1 contract (i.e. Min Volume = 1 MW) | | |
| Volume tick | 1 contract (i.e. Volume Tick = 1 MW) | | |
| Price unit | €/MWh, 3 decimal digits | | |
| Price tick | 0.025 €/MWh | | |
| Total Contract Volume | = Number of contracts x Contract volume (1 MW) x Number of delivery hours of the Contract (taking into account summer/winter time-shift) | | |
| Transformation for clearing purposes | Immediately after the conclusion of the trade, each WE and BH contract are replaced by corresponding daily contracts so the covered delivery period remains the same. | | |
| Delivery | All contracts are physical contracts and lead to physical deliveries on the specified virtual point. Delivery occurs each calendar day of the delivery period. For a given day D of the delivery period, the delivery goes from 06:00 a.m. CET of day D to 06:00 a.m. CET of day D+1. For Hourly products however, delivery occurs on an individual hour. * There are physical delivery restrictions according to the balancing group contract ("Provisions for exchange-traded products that are subject to specific physical delivery restrictions") in case of trading the products of PEGAS Spot NCG-L and NCG-H. The relevant trading party is obliged to fulfill these physical delivery restrictions. | | |

| Segment | PEGAS SPOT | | | | | | |
|--------------------------------------|--|-------------------------|-----------------------|------------------------|------------------------|-------------------------|--------------------------|
| Name of the Products | PEGAS Spot NCG H North* | PEGAS Spot NCG H South* | PEGAS Spot NCG H Mid* | PEGAS Spot NCG L West* | PEGAS Spot NCG L East* | PEGAS Spot NCG L Elten* | PEGAS Spot NCG L Vreden* |
| Area | NCG H North | NCG H South | NCG H Mid | NCG L West | NCG L East | NCG L Elten | NCG L Vreden |
| Delivery area (virtual points) | NCG (NetConnect Germany) | | | | | | |
| Tradable Products | WD (Within Day) DA (Day-Ahead) WE (Week-End) SAT (Saturday) SUN (Sunday) BH (Bank Holiday) ID (Individual Day) | | | | | HR (Hourly) | |
| Underlying | High calorific natural gas (H-gas quality) Low calorific natural gas (L-gas quality) | | | | | | |
| Negative prices | Negative Prices not allowed. | | | | | | |
| Contract Volumes units | MW | | | | | | |
| Contract volume | 1 MW | | | | | | |
| Minimum lot size | 1 contract (i.e. Min Volume = 1 MW) | | | | | | |
| Volume tick | 1 contract (i.e. Volume Tick = 1 MW) | | | | | | |
| Price unit | €/MWh, 3 decimal digits | | | | | | |
| Price tick | 0.025 €/MWh | | | | | | |
| Total Contract Volume | = Number of contracts x Contract volume (1 MW) x Number of delivery hours of the Contract (taking into account summer/winter time-shift) | | | | | | |
| Transformation for clearing purposes | Immediately after the conclusion of the trade, each WE and BH contract are replaced by corresponding daily contracts so the covered delivery period remains the same. | | | | | | |
| Delivery | <p>All Products are physical contracts and lead to physical deliveries on the specific area designated in the Product's name.</p> <p>Delivery occurs each calendar day of the delivery period.</p> <p>For a given day D of the delivery period, the delivery goes from 06:00 a.m CET of day D to 06:00 a.m. CET of day D+1.</p> <p>For Hourly products however, delivery occurs on an individual hour.</p> <p>* There are physical delivery restrictions according to the balancing group contract ("Provisions for exchange-traded products that are subject to specific physical delivery restrictions") in case of trading these products. The relevant trading party is obliged to fulfill these physical delivery restrictions.</p> <p>Taking into account the specificities of these Products, Powernext SAS may occasionally have to disclose information relating to a given Transaction to NCG, upon its request. Such disclosure is made in accordance with article 1.2.5.6 of the Powernext Commodities Market Rules.</p> | | | | | | |

| Segment | PEGAS SPOT | | |
|---|---|-----------------------|--|
| | PEGAS Spot GASPOOL | PEGAS Spot GASPOOL-L* | PEGAS Spot GASPOOL-H* |
| Name of the Products | | | |
| Delivery (virtual points) | GASPOOL (GASPOOL Balancing Services) | | |
| Tradable Products | WD (Within Day) DA (Day-Ahead) WE (Week-End) SAT (Saturday) SUN (Sunday) BH (Bank Holiday) ID (Individual Day) HR (Hourly) | | WD (Within Day) DA (Day-Ahead) WE (Week-End) SAT (Saturday) SUN (Sunday) BH (Bank Holiday) ID (Individual Day) |
| Underlying | GASPOOL natural gas regardless of gas quality GASPOOL H: High calorific natural gas (H-gas quality) GASPOOL L: Low calorific natural gas (L-gas quality) | | |
| Negative prices | Negative Prices not allowed. | | |
| Contract Volumes units | MW | | |
| Contract volume | 1 MW | | |
| Minimum lot size | 1 contract (i.e. Min Volume = 1 MW) | | |
| Volume tick | 1 contract (i.e. Volume Tick = 1 MW) | | |
| Price unit | €/MWh, 3 decimal digits | | |
| Price tick | 0.025 €/MWh | | |
| Total Contract Volume | = Number of contracts x Contract volume (1 MW) x Number of delivery hours of the Contract (taking into account summer/winter time-shift) | | |
| Transformation for clearing purposes | Immediately after the conclusion of the trade, each WE and BH contract are replaced by corresponding daily contracts so the covered delivery period remains the same. | | |
| Delivery | All contracts are physical contracts and lead to physical deliveries on the specified virtual point. Delivery occurs each calendar day of the delivery period. For a given day D of the delivery period, the delivery goes from 06:00 a.m. CET of day D to 06:00 a.m. CET of day D+1. For Hourly products however, delivery occurs on an individual hour. * There are physical delivery restrictions according to the balancing group contract ("Provisions for exchange-traded products that are subject to specific physical delivery restrictions") in case of trading the products of PEGAS Spot GASPOOL-L and GASPOOL-H. The relevant trading party is obliged to fulfill these physical delivery restrictions. | | |

| Segment | PEGAS SPOT | | | | | |
|--------------------------------------|--|-------------------------------|-----------------------------------|-------------------------------|------------------------------------|----------------------------------|
| Name of the Products | PEGAS Spot GASPOOL Ontras H-Gas* | PEGAS Spot GASPOOL GuD H-Gas* | PEGAS Spot GASPOOL Gascade H-Gas* | PEGAS Spot GASPOOL GuD L-Gas* | PEGAS Spot GASPOOL GTG Nord L-Gas* | PEGAS Spot GASPOOL Nowega L-Gas* |
| Area | Ontras H | GuD H | Gascade H | GuD L | GTG Nord L | Nowega L |
| Delivery area (virtual points) | GASPOOL (GASPOOL Balancing Services) | | | | | |
| Tradable Products | WD (Within Day) DA (Day-Ahead) WE (Week-End) SAT (Saturday) SUN (Sunday) BH (Bank Holiday) ID (Individual Day) | | | | | |
| Underlying | High calorific natural gas (H-gas quality) Low calorific natural gas (L-gas quality) | | | | | |
| Negative prices | Negative Prices not allowed. | | | | | |
| Contract Volumes units | MW | | | | | |
| Contract volume | 1 MW | | | | | |
| Minimum lot size | 1 contract (i.e. Min Volume = 1 MW) | | | | | |
| Volume tick | 1 contract (i.e. Volume Tick = 1 MW) | | | | | |
| Price unit | €/MWh, 3 decimal digits | | | | | |
| Price tick | 0.025 €/MWh | | | | | |
| Total Contract Volume | = Number of contracts x Contract volume (1 MW) x Number of delivery hours of the Contract (taking into account summer/winter time-shift) | | | | | |
| Transformation for clearing purposes | Immediately after the conclusion of the trade, each WE and BH contract are replaced by corresponding daily contracts so the covered delivery period remains the same. | | | | | |
| Delivery | <p>All Products are physical contracts and lead to physical deliveries on the specific area designated in the Product's name.</p> <p>Delivery occurs each calendar day of the delivery period.</p> <p>For a given day D of the delivery period, the delivery goes from 06:00 a.m CET of day D to 06:00 a.m. CET of day D+1.</p> <p>* There are physical delivery restrictions according to the balancing group contract ("Provisions for exchange-traded products that are subject to specific physical delivery restrictions") in case of trading these products. The relevant trading party is obliged to fulfill these physical delivery restrictions. Taking into account the specificities of these Products, Powernext SAS may occasionally have to disclose information relating to a given Transaction to GASPOOL, upon its request. Such disclosure is made in accordance with article 1.2.5.6 of the Powernext Commodities Market Rules.</p> | | | | | |

4 – Tradable Products on the Dutch delivery area

| | |
|---|---|
| Segment | PEGAS SPOT |
| Name of the Products | PEGAS Spot TTF |
| Delivery(virtual points) | TTF (Gasunie Transport Services B.V.) |
| Tradable Products | WD (Within Day) DA (Day-Ahead) WE (Week-End) SAT (Saturday) SUN (Sunday) BH (Bank Holiday) ID (Individual Day) HR (Hourly) |
| Underlying | Natural gas at the conditions of the TSO of the concerned delivery area |
| Negative prices | Negative Prices not allowed. |
| Contract Volumes units | MW |
| Contract volume | 1 MW |
| Minimum lot size | 1 contract (i.e. Min Volume = 1 MW) |
| Volume tick | 1 contract (i.e. Volume Tick = 1 MW) |
| Price unit | €/MWh, 3 decimal digits |
| Price tick | 0.025 €/MWh |
| Total Contract Volume | = Number of contracts x Contract volume (1 MW) x Number of delivery hours of the Contract (taking into account summer/winter time-shift) |
| Transformation for clearing purposes | Immediately after the conclusion of the trade, each WE and BH contract are replaced by corresponding daily contracts so the covered delivery period remains the same. |
| Delivery | All contracts are physical contracts and lead to physical deliveries on the specified virtual point. Delivery occurs each calendar day of the delivery period. For a given day D of the delivery period, the delivery goes from 06:00 a.m. CET of day D to 06:00 a.m. CET of day D+1. For Hourly products however, delivery occurs on an individual hour. |

5 – Tradable Products on the British delivery area

| | |
|---|---|
| Segment | PEGAS SPOT |
| Name of the Products | PEGAS Spot NBP |
| Delivery (virtual points) | NBP (National Grid) |
| Tradable Products | WD (Within Day) DA (Day-Ahead) WE (Week-End) SAT (Saturday) SUN (Sunday) BH (Bank Holiday) ID (Individual Day) |
| Underlying | Natural gas at the conditions of the TSO of the concerned delivery area |
| Negative prices | Negative Prices not allowed. |
| Contract Volumes units | Kilotherms per day (kth/d) (1 therm = 29.3071 kilowatt hours) |
| Contract volume | 1 kth/d or 1,000 therms/day |
| Minimum lot size | 1 contract (i.e. Min Volume = 1,000 therms/day) for Orders in the Order Book |
| Volume tick | 1 contract (i.e. Min Volume = 1,000 therms/day) for Orders in the Order Book |
| Price unit | GBP pence/therm (p/th), 3 decimal digits |
| Price tick | GBP 0.005 p/th for Orders in the Order Book |
| Total Contract Volume | = Number of contracts x Contract volume (1,000 therms/day) x Number of delivery days of the Contract |
| Transformation for clearing purposes | Immediately after the conclusion of the trade, each WE and BH contract are replaced by corresponding daily contracts so the covered delivery period remains the same. |
| Delivery | All contracts are physical contracts and lead to physical deliveries on the specified virtual point. Delivery occurs each calendar day of the delivery period. For a given day D of the delivery period, the delivery goes from 06:00 a.m. CET of day D to 06:00 a.m. CET of day D+1. |

6 – Tradable Products on the Danish delivery area

| | |
|---|--|
| Segment | PEGAS SPOT |
| Name of the Products | PEGAS Spot ETF |
| Delivery(virtual points) | ETF (Energinet.dk) |
| Tradable Products | WD (Within Day) DA (Day-Ahead) WE (Week-End) SAT (Saturday) SUN (Sunday) BH (Bank Holiday) ID (Individual Day) |
| Underlying | Natural gas at the conditions of the TSO of the concerned delivery area |
| Negative prices | Negative Prices not allowed. |
| Contract Volumes units | MW |
| Contract volume | 1 MW |
| Minimum lot size | 1 contract (i.e. Min Volume = 1 MW) |
| Volume tick | 1 contract (i.e. Volume Tick = 1 MW) |
| Price unit | €/MWh, 3 decimal digits |
| Price tick | 0.025 €/MWh |
| Total Contract Volume | = Number of contracts x Contract volume (1 MW) x Number of delivery hours of the Contract (taking into account summer/winter time-shift) |
| Transformation for clearing purposes | Immediately after the conclusion of the trade, each WE and BH contract are replaced by corresponding daily contracts so the covered delivery period remains the same. |
| Delivery | All contracts are physical contracts and lead to physical deliveries on the specified virtual point. Delivery occurs each calendar day of the delivery period. For a given day D of the delivery period, the delivery goes from 06:00 a.m. CET of day D to 06:00 a.m. CET of day D+1. |

7 – Tradable Products on the Austrian delivery area

| | |
|--|--|
| Segment | PEGAS SPOT |
| Name of the Products | PEGAS Spot CEGH VTP |
| Delivery(virtual points) | CEGH VTP (Central European Gas Hub AG) |
| Tradable Products | WD (Within Day) |
| Underlying | Natural gas at the conditions of the TSO of the concerned delivery area |
| Negative prices | Negative Prices not allowed. |
| Contract Volumes units | MW |
| Contract volume | 1 MW |
| Minimum lot size | 1 contract (i.e. Min Volume = 1 MW) |
| Volume tick | 1 contract (i.e. Volume Tick = 1 MW) |
| Price unit | €/MWh, 3 decimal digits |
| Price tick | 0.025 €/MWh |
| Total Contract Volume | = Number of contracts x Contract volume (1 MW) x Number of delivery hours of the Contract (taking into account summer/winter time-shift) |
| Transformation for clearing purposes | Immediately after the conclusion of the trade, each WE and BH contract are replaced by corresponding daily contracts so the covered delivery period remains the same. |
| Delivery | All contracts are physical contracts and lead to physical deliveries on the specified virtual point. Delivery occurs each calendar day of the delivery period. For a given day D of the delivery period, the delivery goes from 06:00 a.m. CET of day D to 06:00 a.m. CET of day D+1. |
| Trading sessions | Continuous and Auction trading sessions (last 15minutes of every hour) |
| Order types available | “Limit”, “Must Be Filled”, “Market To Limit”, “Fill or kill” and “Fill and kill” orders |
| Conditions of Limit Price for Orders in the Orderbook | Contrary to the stipulation of the Market Rules, the Limit price of “Limit”, “Fill or kill” and “Fill and kill” orders can be posted at the bid even if they are higher than the Price of the best opposite Order in the Orderbook and respectively at the ask even if they are lower than the Price of the best opposite Order. The matching will be at the Best Limit Price available. |

| | |
|---|--|
| Segment | PEGAS SPOT |
| Name of the Products | PEGAS Spot CEGH VTP |
| Delivery(virtual points) | CEGH VTP (Central European Gas Hub AG) |
| Tradable Products | HR (Hourly) DA (Day-Ahead) WE (Week-End) SAT (Saturday) SUN (Sunday) BH (Bank Holiday) ID (Individual Day) |
| Underlying | Natural gas at the conditions of the TSO of the concerned delivery area |
| Negative prices | Negative Prices not allowed. |
| Contract Volumes units | MW |
| Contract volume | 1 MW |
| Minimum lot size | 1 contract (i.e. Min Volume = 1 MW) |
| Volume tick | 1 contract (i.e. Volume Tick = 1 MW) |
| Price unit | €/MWh, 3 decimal digits |
| Price tick | 0.025 €/MWh |
| Total Contract Volume | = Number of contracts x Contract volume (1 MW) x Number of delivery hours of the Contract (taking into account summer/winter time-shift) |
| Transformation for clearing purposes | Immediately after the conclusion of the trade, each WE and BH contract are replaced by corresponding daily contracts so the covered delivery period remains the same. |
| Delivery | All contracts are physical contracts and lead to physical deliveries on the specified virtual point. Delivery occurs each calendar day of the delivery period. For a given day D of the delivery period, the delivery goes from 06:00 a.m. CET of day D to 06:00 a.m. CET of day D+1. |

8 – Tradable Products on the Czech delivery area

| | |
|---|--|
| Segment | PEGAS SPOT |
| Name of the Products | PEGAS CEGH Spot CZ VTP |
| Delivery(virtual points) | CZ VTP (NET4GAS) |
| Tradable Products | DA (Day-Ahead) WE (Week-End) SAT (Saturday) SUN (Sunday) BH (Bank Holiday) ID (Individual Day) |
| Underlying | Natural gas at the conditions of the TSO of the concerned delivery area |
| Negative prices | Negative Prices not allowed. |
| Contract Volumes units | MW |
| Contract volume | 1 MW |
| Minimum lot size | 1 contract (i.e. Min Volume = 1 MW) |
| Volume tick | 1 contract (i.e. Volume Tick = 1 MW) |
| Price unit | €/MWh, 3 decimal digits |
| Price tick | 0.025 €/MWh |
| Total Contract Volume | = Number of contracts x Contract volume (1 MW) x Number of delivery hours of the Contract (taking into account summer/winter time-shift) |
| Transformation for clearing purposes | Immediately after the conclusion of the trade, each WE and BH contract are replaced by corresponding daily contracts so the covered delivery period remains the same. |
| Delivery | All contracts are physical contracts and lead to physical deliveries on the specified virtual point. Delivery occurs each calendar day of the delivery period. For a given day D of the delivery period, the delivery goes from 06:00 a.m. CET of day D to 06:00 a.m. CET of day D+1. |

9 – Tradable Spreads between Products

Powernext offers Spreads between some of the Products listed on its Market Segments. Trading on these Spreads results by the buying (respectively the selling) of the first listed Product and the selling (respectively the buying) on the second listed Product.

These Spreads between Products are as follows and are tradable on the following maturities:

| | |
|---|---|
| PEGAS Spot GRTgaz Teréga PEG Downstream / PEGAS Spot GRTgaz Teréga PEG | <ul style="list-style-type: none"> ▪ Within-Day |
| PEGAS Spot PEG / PEGAS Spot ZTP | <ul style="list-style-type: none"> ▪ Day-Ahead ▪ Week-End ▪ Saturday ▪ Sunday ▪ Bank Holiday ▪ Individual Day |
| PEGAS Spot PEG / PEGAS Spot NCG | <ul style="list-style-type: none"> ▪ Day-Ahead ▪ Week-End ▪ Saturday ▪ Sunday ▪ Bank Holiday ▪ Individual Day |
| PEGAS Spot PEG / PEGAS Spot TTF | <ul style="list-style-type: none"> ▪ Day-Ahead ▪ Week-End ▪ Saturday ▪ Sunday ▪ Bank Holiday ▪ Individual Day |
| PEGAS Spot GASPOOL / PEGAS Spot NCG | <ul style="list-style-type: none"> ▪ Within-Day ▪ Day-Ahead ▪ Week-End ▪ Saturday ▪ Sunday ▪ Bank Holiday ▪ Individual Day |
| PEGAS Spot GASPOOL / PEGAS Spot TTF | <ul style="list-style-type: none"> ▪ Within-Day ▪ Day-Ahead ▪ Week-End ▪ Saturday ▪ Sunday ▪ Bank Holiday ▪ Individual Day |
| PEGAS Spot NCG / PEGAS Spot TTF | <ul style="list-style-type: none"> ▪ Within-Day ▪ Day-Ahead ▪ Week-End ▪ Saturday ▪ Sunday ▪ Bank Holiday ▪ Individual Day |
| PEGAS Spot NCG L / PEGAS Spot NCG H | <ul style="list-style-type: none"> ▪ Within-Day ▪ Day-Ahead ▪ Week-End ▪ Saturday ▪ Sunday ▪ Bank Holiday ▪ Individual Day |
| PEGAS Spot GASPOOL L / PEGAS Spot GASPOOL H | <ul style="list-style-type: none"> ▪ Within-Day ▪ Day-Ahead ▪ Week-End ▪ Saturday |

| | |
|--|---|
| | <ul style="list-style-type: none"> ▪ Sunday ▪ Bank Holiday ▪ Individual Day |
| PEGAS Spot NCG L / PEGAS Spot TTF | <ul style="list-style-type: none"> ▪ Within-Day ▪ Day-Ahead ▪ Week-End ▪ Saturday ▪ Sunday ▪ Bank Holiday ▪ Individual Day |
| PEGAS Spot GASPOOL L / PEGAS Spot TTF | <ul style="list-style-type: none"> ▪ Within-Day ▪ Day-Ahead ▪ Week-End ▪ Saturday ▪ Sunday ▪ Bank Holiday ▪ Individual Day |
| PEGAS Spot ZTP / PEGAS Spot TTF | <ul style="list-style-type: none"> ▪ Within-Day ▪ Day-Ahead ▪ Week-End ▪ Saturday ▪ Sunday ▪ Bank Holiday ▪ Individual Day |
| PEGAS Spot ZTP / PEGAS Spot NCG | <ul style="list-style-type: none"> ▪ Within-Day ▪ Day-Ahead ▪ Week-End ▪ Saturday ▪ Sunday ▪ Bank Holiday ▪ Individual Day |
| PEGAS Spot ZTP / PEGAS Spot GASPOOL | <ul style="list-style-type: none"> ▪ Within-Day ▪ Day-Ahead ▪ Week-End ▪ Saturday ▪ Sunday ▪ Bank Holiday ▪ Individual Day |
| PEGAS Spot ZEE / PEGAS Spot NBP | <ul style="list-style-type: none"> ▪ Within-Day ▪ Day-Ahead ▪ Week-End ▪ Saturday ▪ Sunday ▪ Bank Holiday ▪ Individual Day |
| PEGAS Spot ETF/PEGAS Spot TTF | <ul style="list-style-type: none"> ▪ Within-Day ▪ Day-Ahead ▪ Week-End ▪ Saturday ▪ Sunday ▪ Bank Holiday ▪ Individual Day |
| PEGAS Spot ETF/PEGAS Spot NCG | <ul style="list-style-type: none"> ▪ Within-Day ▪ Day-Ahead ▪ Week-End ▪ Saturday ▪ Sunday ▪ Bank Holiday ▪ Individual Day |
| PEGAS Spot ETF/PEGAS Spot GASPOOL | <ul style="list-style-type: none"> ▪ Within-Day ▪ Day-Ahead |

| | |
|---|---|
| | <ul style="list-style-type: none"> ▪ Week-End ▪ Saturday ▪ Sunday ▪ Bank Holiday ▪ Individual Day |
| PEGAS Spot CEGH VTP/PEGAS Spot TTF | <ul style="list-style-type: none"> ▪ Day-Ahead ▪ Week-End ▪ Saturday ▪ Sunday ▪ Bank Holiday ▪ Individual Day |
| PEGAS Spot CEGH VTP/PEGAS Spot NCG | <ul style="list-style-type: none"> ▪ Day-Ahead ▪ Week-End ▪ Saturday ▪ Sunday ▪ Bank Holiday ▪ Individual Day |
| PEGAS Spot CEGH VTP/PEGAS Spot GASPOOL | <ul style="list-style-type: none"> ▪ Day-Ahead ▪ Week-End ▪ Saturday ▪ Sunday ▪ Bank Holiday ▪ Individual Day |
| PEGAS CEGH Spot CZ VTP/PEGAS Spot TTF | <ul style="list-style-type: none"> ▪ Day-Ahead ▪ Week-End ▪ Saturday ▪ Sunday ▪ Bank Holiday ▪ Individual Day |
| PEGAS CEGH Spot CZ VTP/PEGAS Spot NCG | <ul style="list-style-type: none"> ▪ Day-Ahead ▪ Week-End ▪ Saturday ▪ Sunday ▪ Bank Holiday ▪ Individual Day |
| PEGAS CEGH Spot CZ VTP/PEGAS Spot GASPOOL | <ul style="list-style-type: none"> ▪ Day-Ahead ▪ Week-End ▪ Saturday ▪ Sunday ▪ Bank Holiday ▪ Individual Day |
| PEGAS CEGH Spot CZ VTP/PEGAS Spot CEGH VTP | <ul style="list-style-type: none"> ▪ Day-Ahead ▪ Week-End ▪ Saturday ▪ Sunday ▪ Bank Holiday ▪ Individual Day |

FEES, CHARGES, INVOICES, VAT

POWERNEXT® COMMODITIES / PEGAS Spot Notice n° COMMODITIES-2018-37 01/11/2018

Article 1. Annual Fees

1- Annual membership fees

Annual membership fees on PEGAS Spot on the following countries and delivery zones

- **Germany:** NCG, NCG H&L, GASPOOL, GPL H&L, GPL Locationals¹, NCG Locationals²
- **Belgium:** ZTP, ZTPL, ZEE
- **France :** PEG, GRTgaz Teréga Locationals³
- **Netherlands :** TTF
- **United Kingdom :** NBP

are determined according to the number of countries included in the Member's subscription,

- | | |
|-----------------------------|------------|
| (1) Up to two countries | EUR 9,000 |
| (2) More than two countries | EUR 15,000 |

For such countries and in case of multiple accesses to PEGAS Spot, PEGAS OTF and PEGAS Regulated Market:

- The total amount of annual membership fees shall be limited to EUR 9,000 for Members who join package (1).
- The total amount of annual membership fees shall be limited to EUR 15,000 for Members who join package (2).

For the subscriptions (1) and (2), the first year of annual membership fees will be free of charge for new members. A member who chooses at first a subscription to up to two countries (1) will be able to change for the first time to a subscription to more than two countries (2) without paying the difference in fees between the two subscriptions for 12 months.

(3) Annual membership fees on PEGAS Spot for **Denmark** ETF Delivery Zone are EUR 10,000.

For Denmark and in case of multiple accesses to PEGAS Spot, PEGAS OTF and PEGAS Regulated Market: the total amount of annual membership fees shall be limited to EUR 10,000 for Members who join package (3).

For the subscriptions (3) in 2017, the first year of annual membership fees will be free of charge for new members.

(4) Annual membership fees on PEGAS Spot for the **Austrian** CEGH VTP Delivery Zone are EUR 15,200.

For Austria and in case of multiple accesses to PEGAS Spot, PEGAS OTF and PEGAS Regulated Market: the total amount of annual membership fees shall be limited to EUR 15,200 for Members who join package (4).

Members entering the Austrian CEGH VTP Delivery Zone for balancing purposes, without any trading account, are considered as Passive Member and can benefit from a reduced membership fee of EUR 10,000 on the hub CEGH VTP.

(5) Annual membership fees on PEGAS Spot for the **Czech** CZ VTP Delivery Zone are EUR 4,200.

In case of an existing membership on PEGAS Spot CEGH VTP, PEGAS OTF CEGH VTP or PEGAS Regulated Market CEGH VTP under package (4), the annual membership fees for **Czech Republic** CZ VTP Delivery Zone are reduced to EUR 3,000 for Members who join package (5).

2- Annual membership fees for Clearing Members

The Annual membership fees shall be limited to EUR 4,000 for Clearing Member who trade for their own account only if one of their clients defaults. These reduced fees entitle the Clearing Member to a single trading license, which shall be activated solely to manage the position of a defaulting client.

3- Other annual fees

An annual trading account Fee of EUR 1,800 per year shall be invoiced for each user license. License for a downstream account for Trayport Trading Gateway® users shall be charged EUR 1,800 per year.

¹ GASPOOL Ontras H-Gas, GASPOOL GuD H-Gas, GASPOOL Gascade H-Gas, GASPOOL GuD L-Gas, GASPOOL GTG Nord L-Gas, GASPOOL Nowega L-Gas

² NCG H North, NCG H South, NCG H Mid, NCG L West, NCG L East, NCG L Elten, NCG L Vreden.

³ GRTgaz Teréga PEG, GRTgaz Teréga PEG Downstream

Passive Members entering the Austrian CEGH VTP Delivery Zone for balancing purposes will be charged an administrative fee of EUR 1,800 per year.

Shift trader licenses are charged EUR 750 per year.⁴

4- Invoicing

Both membership and technical annual fees are payable monthly by the Members and invoiced at the end of each calendar month. Membership annual fees are established the first day of each month from the date of trading commencement. Technical annual fees are established at the last day of each month from the date of trading commencement.

Powernext SAS shall issue electronic invoices. These invoices shall be available on an FTP server accessible in SFTP and via an https webpage at the address communicated to the Members. As an exception, invoices for CEGH VTP and CZ VTP Membership fees will be sent by email by Central European Gas Hub AG on behalf of Powernext.

Upon express and written demand to Powernext SAS, Members may receive hard copies of the invoices issued to Powernext SAS.

Article 2. Trading fees for Spot Products

1- Trading fees

The Trading Fees shall be charged for each Megawatt-hour (MWh) or Therms of the underlying natural gas in the traded volumes, depending on the Contract's unit of quotation.

For a Transaction on outright Product, Trading Fees amount to:

| | |
|---|----------------------------|
| TTF | EUR 0.005 per MWh |
| PEG, ZTP, ZTP L | EUR 0.01 per MWh |
| NCG, GASPOOL Within-Day | EUR 0.015 per MWh |
| NCG, GASPOOL other maturities | EUR 0.005 per MWh |
| NBP, ZEE | GBP 0.0015 Pence per Therm |
| GRTgaz Teréga PEG, GRTgaz Teréga PEG Downstream | EUR 0.03 per MWh |
| GASPOOL Ontras H-Gas, GASPOOL GuD H-Gas, GASPOOL Gascade H-Gas, | EUR 0.03 per MWh |

| | |
|---|-------------------|
| GASPOOL GuD L-Gas, GASPOOL GTG Nord L-Gas, GASPOOL Nowega L-Gas | |
| NCG H North, NCG H South, NCG H Mid, NCG L West, NCG L East, | EUR 0.03 per MWh |
| TTF Hourly | EUR 0.03 per MWh |
| NCG, GASPOOL Hourly | EUR 0.03 per MWh |
| NCG L Elten, NCG L Vreden Hourly | EUR 0.03 per MWh |
| ETF | EUR 0.02 per MWh |
| CEGH VTP Hourly | EUR 0.01 per MWh |
| CEGH VTP Other maturities | EUR 0.005 per MWh |
| CZ VTP | EUR 0.005 per MWh |

In case of a Transaction on a Spread between Contracts, only the trading fee on the first underlying Contract is applicable.

In case of a Transaction on an Implied Order, only the Trading fee of the underlying Contract of the Implied Order executed on screen is applicable.

2- Fees for cancellation

Powernext SAS shall charge an administrative fee of EUR 500 for cancelling, at a Member's request, Transactions on PEGAS Spot products quoted in EUR. These fees are invoiced per request, including when a request concerns several Transactions.

Powernext SAS shall charge an administrative fee of GBP 400 for cancelling, at a Member's request, Transactions on PEGAS Spot products quoted in GBP. These fees are invoiced per request, including when a request concerns several Transactions.

For cancelling a Transaction related to a Spread between Products or an Implied Order, only one of the resulting transactions is invoiced. These fees shall be charged only to the party requesting the cancellation.

A cancellation of multiple simultaneous Transactions on the same maturity will be charged once for the Transaction with the most important volume.

The fees mentioned in this article shall be billed monthly and included in the invoices mentioned in Article 2.

3- Invoicing

⁴ A Shift trader is an operator from a company whose internal organization requires a specific team of operators trading on a 24/7 basis to be able to meet the company's physical needs of natural gas. Logically, such operators from one company are only authorized on Spot products, they work on a shift pattern and only operators on duty connect to the

system or are active at the same time. Powernext reserves the right to check that Shift traders set up in the trading system comply with this definition and can modify concerned accounts to non shift traders' ones if this definition is not respected.

Trading fees payable monthly by the Members and invoiced at the end of each calendar month.

Powernext SAS shall issue electronic invoices. These invoices, at the exception of CEGH VTP and CZ VTP Membership fees invoice, shall be available on an FTP server accessible in SFTP and via an https webpage at the address communicated to the Members. CEGH VTP and CZ VTP Membership fees will be sent by email by Central European Gas Hub AG on behalf of Powernext.

Upon express and written demand to Powernext SAS, Members may receive hard copies of the invoices issued to Powernext SAS.

Article 3. Value Added Tax on fees

The fees referred to in Articles 1 to 2 of this Appendix assimilated to a provision of services (Article 256 IV of the French Tax Code). The place of supply of such services is where the buyer is established for VAT purposes according to article 259-1 of the French tax code/Article 44 of the directive 2006/112/EC. They are subject to French Value Added Tax at the rate of 20% if the buyer is a French resident or a French establishment of a foreign business. They are not subject to French Value-Added-Tax if the buyer is liable to pay Value-Added Tax in another European Union Member State (in such case Value-Added Tax is due by the buyer in the member state in which the tax is due pursuant to article 196 of the directive 2006/112/EC) or is established outside the European Union. Moreover the buyer acknowledges that VAT should be self-assessed by the buyer pursuant to the tax law applicable in the State where the buyer has its residence. The buyer shall fully hold Powernext harmless in case it did not comply with its tax related obligations towards a State

Article 4. Payment

The fees referred to in Articles 1 to 3 shall be payable on the date of receipt of the electronic copy of the invoice.

They shall be collected by ECC the following days and remitted entirely to Powernext SAS.

If the amounts invoiced are not paid in full within the specified deadline, the sums owed are increased, by right, and without the need for a formal notice to pay, of a fixed rate for recovery fees of forty (40) EUR (art. L441-3 French Commercial Code) in addition to interests for late payments at a rate equal to three times the legally chargeable interest rate. These penalties are due on the day following the due date mentioned on the invoice.

TRADING HOURS, BUSINESS DAYS AND TRADING CALENDARS

POWERNEXT® COMMODITIES / PEGAS Spot

Notice n° COMMODITIES-2019-05

31/01/2019

I. OPENING HOURS

1 Order Book opening hours

Powernext SAS publishes hereafter the Order Book opening hours in accordance with article 2.4.3 of the Powernext® Commodities Market Rules:

- The Order Book is open 7 days a week, 24 hours a day, with the exception of CZ VTP, CZ VTP/TTF, CZ VTP/NCG, CZ VTP/GPL and CZ VTP/ CEGH VTP Products that are open from 8:00 am to 6:00 pm CET time on PEGAS business days, as defined by Market Notice.
- Products are available for trading from 03:00 am CET on the first day of trading of the Product to 03:00 am CET on the day following the last trading day, with the exception of Within-Day Products that are available for trading from 02:00 am CET on the first trading day to 02:00 am CET on the next trading day and of Hourly products that are available for trading 27 hours ahead until 3 hours before delivery.

2 Trading Hours

Powernext SAS publishes hereafter the Trading Hours of PEGAS Spot in accordance with articles 1.4.2.4 and 2.4.3 of the Powernext® Commodities Market Rules.

- Trading is open 7 days a week, 24 hours a day, with the exception of CZ VTP, CZ VTP/TTF, CZ VTP/NCG, CZ VTP/GPL and CZ VTP/ CEGH VTP Products that are open from 8:00 am to 6:00 pm CET time on PEGAS business days, as defined by Market Notice.

PEGAS Spot business days are every day of the calendar except the following:

Market closure days on Powernext Gas in 2019

| | |
|---|--------------------|
| New Year's day | Tue, 1 Jan 2019 |
| Good Friday | Fri, 19 April 2019 |
| Easter Monday | Mon, 22 April 2019 |
| Early May Bank Holiday (First Monday of May) | Mon, 6 May 2019 |
| Spring Bank Holiday (Usually Last Monday of May) | Mon, 27 May 2019 |
| Summer Bank Holiday (Last Monday of August) | Mon, 26 Aug 2019 |
| Christmas Day | Wed, 25 Dec 2019 |
| Boxing Day (First weekday after Christmas) | Thu, 26 Dec 2019 |

II. TRADING CALENDAR

Powernext SAS publishes hereafter the Trading Calendar of PEGAS Spot for the calendar year **2019** in accordance with article 2.4.3 of the Powernext® Commodities Market Rules. Trading Sessions occur 7 days a week, 24 hours a day.

In accordance with article 2.4.3 and with the Market Notice related to the Product Specifications of the Powernext® Commodities Market Rules:

- WD (Within-Day) is tradable each trading day for delivery on the remaining hours of the same day taking into consideration a specific lead time (three hours)
- DA (Day-Ahead) Product is tradable each day for delivery on the following trading day, or alternatively on the day communicated below
- WE (Week-End) Product is tradable the two trading days preceding a weekend for delivery on Saturday and Sunday, or alternatively on the days communicated below
- A SAT (Saturday) Product is tradable on the Thursdays and Fridays preceding a Saturday, or on the days communicated below for delivery on this Saturday
- A SUN (Sunday) Product is tradable on the Thursdays, Fridays and Saturdays preceding a Sunday, or on the days communicated below, for delivery on Sunday
- BH (Bank Holiday) Product is tradable the second and the first trading day preceding one or several consecutive non-business days in the middle of a week (communicated below) for delivery on those non-business days; the calendar of non-business days is communicated below
- ID (Individual Day) Product is tradable on the first trading day preceding one local bank holiday (communicated below), or on the days communicated in a Market Notice, for delivery on the day following this bank holiday
- HR (Hourly) Product is tradable during 24 hours for delivery on an individual hour.

Except for the following contracts, the delivery periods of which have been adapted to take into account the above mentioned non-business days:

BANK HOLIDAYS

| Tradable product | | First day of trading | Last day of trading | Number of delivery days | Delivery start | Delivery End |
|---------------------------|----------------|----------------------|---------------------|-------------------------|------------------|------------------|
| New Year's Day 2019-01-01 | New Year's Day | 28/12/2018 03:00 | 01/01/2019 03:00 | 1 | 01/01/2019 06:00 | 02/01/2019 06:00 |
| Good Friday 2019-04-19 | Good Friday | 17/04/2019 03:00 | 19/04/2019 03:00 | 1 | 19/04/2019 06:00 | 20/04/2019 06:00 |
| Easter Monday 2019-04-22 | Easter Monday | 17/04/2019 03:00 | 22/04/2019 03:00 | 1 | 22/04/2019 06:00 | 23/04/2019 06:00 |
| Early May BH 2019-05-06 | Early May BH | 02/05/2019 03:00 | 06/05/2019 03:00 | 1 | 06/05/2019 06:00 | 07/05/2019 06:00 |
| Spring BH 2019-05-27 | Spring BH | 23/05/2019 03:00 | 27/05/2019 03:00 | 1 | 27/05/2019 06:00 | 28/05/2019 06:00 |
| Summer BH 2019-08-26 | Summer BH | 22/08/2019 03:00 | 26/08/2019 03:00 | 1 | 26/08/2019 06:00 | 27/08/2019 06:00 |
| Xmas Day 2019-12-25 | Xmas Day | 23/12/2019 03:00 | 25/12/2019 03:00 | 1 | 25/12/2019 06:00 | 26/12/2019 06:00 |
| Boxing Day 2019-12-26 | Boxing Day | 23/12/2019 03:00 | 26/12/2019 03:00 | 1 | 26/12/2019 06:00 | 27/12/2019 06:00 |

INDIVIDUAL DAYS Non BH

| Tradable product | | First day of trading | Last day of trading | Number of delivery days | Delivery day | Delivery End |
|-------------------|---|----------------------|---------------------|-------------------------|------------------|------------------|
| January 2, 2019 | Day after New Year's Day | 28/12/2018 03:00 | 31/12/2018 03:00 | 1 | 02/01/2019 06:00 | 03/01/2019 06:00 |
| May 2, 2019 | Day after Labour Day | 30/04/2019 03:00 | 01/05/2019 03:00 | 1 | 02/05/2019 06:00 | 03/05/2019 06:00 |
| May 9, 2019 | Day after Victory Day | 07/05/2019 03:00 | 08/05/2019 03:00 | 1 | 09/05/2019 06:00 | 10/05/2019 06:00 |
| May 31, 2019 | Day after Ascension Day | 29/05/2019 03:00 | 30/05/2019 03:00 | 1 | 31/05/2019 06:00 | 01/06/2019 06:00 |
| June 11, 2019 | Day after Whit Monday | 07/06/2019 03:00 | 10/06/2019 03:00 | 1 | 11/06/2019 06:00 | 12/06/2019 06:00 |
| June 21, 2019 | Day after Fronleichnam | 19/06/2019 03:00 | 20/06/2019 03:00 | 1 | 21/06/2019 06:00 | 22/06/2019 06:00 |
| July 8, 2019 | Day after St Cyril and St Methodius Day | 04/07/2019 03:00 | 05/07/2019 03:00 | 1 | 08/07/2019 06:00 | 09/07/2019 06:00 |
| August 16, 2019 | Day after Assumption Day | 14/08/2019 03:00 | 15/08/2019 03:00 | 1 | 16/08/2019 06:00 | 17/08/2019 06:00 |
| October 4, 2019 | Day after German National Day | 02/10/2019 03:00 | 03/10/2019 03:00 | 1 | 04/10/2019 06:00 | 05/10/2019 06:00 |
| November 1, 2019 | Day after Reformation | 30/10/2019 03:00 | 31/10/2019 03:00 | 1 | 01/11/2019 06:00 | 02/11/2019 06:00 |
| November 4, 2019 | Day after All Saints' Day | 31/10/2019 03:00 | 01/11/2019 03:00 | 1 | 04/11/2019 06:00 | 05/11/2019 06:00 |
| November 21, 2019 | Day after Day of repentance and prayer | 19/11/2019 03:00 | 20/11/2019 03:00 | 1 | 21/11/2019 06:00 | 22/11/2019 06:00 |
| December 27, 2019 | Day after Christmas and Boxing Day | 23/12/2019 03:00 | 24/12/2019 03:00 | 1 | 27/12/2019 06:00 | 28/12/2019 06:00 |

SATURDAY & SUNDAY

| Tradable product | First day of trading | Last day of trading | Number of delivery days | Delivery start | Delivery End |
|------------------|----------------------|---------------------|-------------------------|------------------|------------------|
| SAT 2019-04-20 | 17/04/2019 03:00 | 20/04/2019 03:00 | 1 | 20/04/2019 06:00 | 21/04/2019 06:00 |
| SUN 2019-04-21 | 17/04/2019 03:00 | 21/04/2019 03:00 | 1 | 21/04/2019 06:00 | 22/04/2019 06:00 |

WE

| Tradable product | First day of trading | Last day of trading | Number of delivery days | Delivery start | Delivery End |
|------------------|----------------------|---------------------|-------------------------|------------------|------------------|
| WE 2019-04-19/22 | 17/04/2019 03:00 | 19/04/2019 03:00 | 4 | 19/04/2019 06:00 | 23/04/2019 06:00 |
| WE 2019-05-04/06 | 02/05/2019 03:00 | 04/05/2019 03:00 | 3 | 04/05/2019 06:00 | 07/05/2019 06:00 |
| WE 2019-05-25/27 | 23/05/2019 03:00 | 25/05/2019 03:00 | 3 | 25/05/2019 06:00 | 28/05/2019 06:00 |
| WE 2019-08-24/26 | 22/08/2019 03:00 | 24/08/2019 03:00 | 3 | 24/08/2019 06:00 | 27/08/2019 06:00 |

PARAMETERS SETTING NOTICE

POWERNEXT® COMMODITIES / PEGAS Spot Notice n° COMMODITIES-2018-38 01/11/2018

1 Delivery Organisations on PEGAS Spot

Pursuant to Article 2.1.3 of the Powernext® Commodities Market Rules, Powernext SAS hereby publishes the list of Delivery Organisations on PEGAS Spot:

- GRTgaz, natural gas Transmission System Operator previously owned by Gaz de France,
- Teréga, natural gas Transmission System Operator of the South-West region of France,
- Fluxys SA, natural gas Transmission System Operator of the Belgian regions
- NetConnect Germany GmbH & Co. KG, Market Area Manager for Germany
- GASPOOL Balancing Services GmbH, Market Area Manager for Germany
- Gasunie transport Services B.V., natural gas Transmission System Operator of Netherlands
- National Grid, natural gas Transmission System Operator of British region
- Energinet.dk, natural gas Transmission System Operator of the Danish region
- Central European Gas Hub AG
- NET4GAS, natural gas Transmission System Operator of Czech Republic

2 Operating support

Members shall have access to hotline support for their trading access as well as for, particularly as regards:

- queries about the functions of the Trading System,
- queries about any malfunctions that may occur.

Operating support is provided 24/7 by the following communication means:

| | Mail | Phone |
|--|-----------------------|-------------------|
| Mon - Fri, during Business hours (08:00-18:30 CET) | gas@powernext.com | +33 1 73 03 96 24 |
| Out of Business hours (including week ends and Bank Holidays) | gasduty@powernext.com | |

This support service shall cover this system only; it does not cover malfunctions related to the configuration of the Members' hardware or Internet connections.

During business hours, Powernext Market Operations can upon request enter orders or trade on behalf of a registered trader. This should only be done in exceptional circumstances if the Member cannot access the trading system. There is no fee associated with this service. A confirmation of the request by email is required prior to the trading or order on behalf. During off business hours, a limited service is provided to Members. For instance, account setup or modifications and trade on behalf are not performed.

3 Transaction Cancellation

Pursuant to Article 1.4.2.9 1° of the Powernext® Commodities Market Rules, the cancellation requests must be telephoned to Powernext SAS (contact numbers specified above) no later than ten (10) minutes after Matching has occurred. Powernext SAS informs the market when the cancellation is effective.

For WD products on NCG, GASPOOL, ZTP, ZTP L, ZEE, TTF, ETF and CEGH VTP, cancellation of the trade can only be performed if the trade has been concluded more than 20 minutes prior to the next hour. Trade cancellation for trades executed during auction trading sessions on CEGH VTP Within-Day is therefore not allowed.

For DA, WE, Sat, Sun, BH and ID products on all hubs and WD products on NBP and PEG, cancellation of the trade can only be performed if the trade has been concluded more than 20 minutes prior to the start of the next contract.

For HR products on all hubs, cancellation of the trade can only be performed if the trade has been concluded more than 20 minutes prior to the end of the trading period of the contract.

4 PEGAS Spot WDRP Price References

Powernext SAS indicates hereafter the list of Products for which PEGAS Spot WDRP (“Within Day Reference Price”) reference prices will be published in accordance with article 2.5.2 of the Powernext® Commodities Market Rules:

| | | | | | | |
|--------|--------|--------|------------|--------|-------------|--------|
| PEG WD | TTF WD | NCG WD | GASPOOL WD | ETF WD | CEGH VTP WD | ZTP WD |
|--------|--------|--------|------------|--------|-------------|--------|

The calculation rule of the PEGAS Spot EGSI is defined in a Market Notice.

5 PEGAS Spot EGSI Price References

Powernext SAS indicates hereafter the list of Products for which PEGAS Spot EGSI (“European Gas Spot Index”) reference prices will be published in accordance with article 2.5.2 of the Powernext® Commodities Market Rules:

| | | | | | | | |
|----------------------------|----------------------------|----------------------------|--|----------------------------|---|----------------------------|-------------------------------------|
| PEG DA PEG WE PEG BH | TTF DA TTF WE TTF BH | NCG DA NCG WE NCG BH | GASPOOL DA GASPOOL WE GASPOOL BH | ETF DA ETF WE ETF BH | CEGH VTP DA CEGH VTP WE CEGH VTP BH | ZTP DA ZTP WE ZTP BH | CZ VTP DA CZ VTP WE CZ VTP BH |
|----------------------------|----------------------------|----------------------------|--|----------------------------|---|----------------------------|-------------------------------------|

The calculation rule of the PEGAS Spot EGSI is defined in a Market Notice.

6 PEGAS Spot EOD Price References

Powernext SAS indicates hereafter the list of Products for which PEGAS Spot EOD reference prices will be published in accordance with article 2.5.2 of the Powernext® Commodities Market Rules:

| | | | | | | | |
|----------------------------|----------------------------|----------------------------|--|----------------------------|---|----------------------------|-------------------------------------|
| PEG DA PEG WE PEG BH | TTF DA TTF WE TTF BH | NCG DA NCG WE NCG BH | GASPOOL DA GASPOOL WE GASPOOL BH | ETF DA ETF WE ETF BH | CEGH VTP DA CEGH VTP WE CEGH VTP BH | ZTP DA ZTP WE ZTP BH | CZ VTP DA CZ VTP WE CZ VTP BH |
|----------------------------|----------------------------|----------------------------|--|----------------------------|---|----------------------------|-------------------------------------|

7 Configuration, licenses and support

7.1 Configuration of the Member's equipment

Members shall have the following hardware and software:

- a PC running Windows, with a pack permitting 128 bit encryption, with a processor of at least 2 GHz Pentium class, memory at least 2 GB RAM with one of the following Operating System:
 - Microsoft Windows Vista Business
 - Microsoft Windows XP with service pack 2
 - Microsoft Windows 7.
- a firewall with the following ports open:
 - TCP 12995
 - TCP 12997
 - TCP 443
- an Internet connection and Microsoft Internet Explorer version 6 or higher.

7.2 License for the Global Vision system

Before using the Global Vision system, Members must accept the terms of the license, which is displayed in electronic form when the system is used for the first time.

If the aforementioned license or the Trading Agreement is terminated, Members must uninstall and completely remove Global Vision from their systems.

7.3 Operating and technical documentation

The technical documentation shall be made available by Pownext SAS by any means at its disposal.

The purpose of such documentation is to provide the explanations needed for using the Global Vision software. It is subject to change and has no contractual value. The recommendations must be followed to ensure proper use of the Trading System.

7.4 Communications

→ Normal procedures

| | Transmission of Orders | | Publication of Transactions |
|---------------------------------------|---|-----------------|--|
| Information Sent | Price Volume Order Types Time of transmission | | Price Volume Time of the Transaction |
| Schedule | In real time during the opening hours of the Order Book | | During a trading session, in real time, as soon as the transaction is executed |
| Sender | Members | | Pownext SAS |
| Receiver | Pownext SAS | | Members |
| Primary system used | Global Vision | | Global Vision |
| Secondary system used | Email / Phone | | FTP Server |
| Transmission of Back Office documents | | | |
| Information Sent | "Trades" files | Fees Invoices | Membership invoices, GV licenses, other fees |
| Schedule | At regular intervals during the trading session. | Monthly | Quarterly |
| Sender | Pownext SAS | Pownext SAS | Pownext SAS |
| Receiver | Trading Members | Trading Members | Trading Members |
| Primary system used | Pownext FTP | Pownext FTP | Pownext FTP |
| Secondary system used | Email | Email Post | Email Post |

→ Fallback procedures

If the trading system is unavailable:

- Trading shall be suspended.
- Pownext shall inform Members by any means including emails of the trading suspension and when trading will resume.

METHODOLOGY FOR ESTABLISHING PEGAS SPOT EOD PRICE REFERENCES

POWERNEXT® COMMODITIES / PEGAS Spot Notice n° COMMODITIES-2018-39 01/11/2018

Powernext has designed a new methodology to determine the PEGAS Spot EOD price references. The aims of the following document are to:

- Describe the methodology used for calculating the PEGAS Spot EOD price references and give the values of the parameters utilized in the calculation;
- Indicate in which case the PEGAS Spot EOD price references are determined by a Price Committee.

The PEGAS Spot EOD Price references are calculated for the following Products:

- PEGAS Spot PEG
- PEGAS Spot TTF
- PEGAS Spot NCG
- PEGAS Spot GASPOOL
- PEGAS Spot ETF
- PEGAS Spot CEGH VTP
- PEGAS Spot ZTP
- PEGAS CEGH Spot CZ VTP

Table of Content

| | |
|----------------|--|
| STEP 1: | DEFINITION OF THE CALCULATION PERIOD DURATION |
| STEP 2: | FILTERING OF ORDERS AND TRADES OF SUFFICIENT VOLUME |
| STEP 3: | DETERMINATION OF THE CUMULATED SPREAD DURATION |
| STEP 4: | CALCULATION OF THE AVERAGE ASK AND THE AVERAGE BID |
| STEP 5: | CALCULATION OF THE AVERAGE MID AND AVERAGE SPREAD |
| STEP 6: | CALCULATION OF THE WEIGHTED AVERAGE TRADE PRICE |
| STEP 7: | PRICE COMMITTEE TRIGGERING CONDITIONS |
| STEP 8: | CALCULATION OF THE PEGAS SPOT EOD PRICE REFERENCES |
| STEP 9: | ROUNDING OF PEGAS SPOT EOD PRICE REFERENCES |

The following methodology applies to the following Products of PEGAS Spot:

- PEG DA
- PEG WE
- PEG BH
- TTF DA
- TTF WE
- TTF BH
- NCG DA
- NCG WE
- NCG BH
- GASPOOL DA
- GASPOOL WE
- GASPOOL BH
- ETF DA
- ETF WE
- ETF BH
- CEGH VTP DA
- CEGH VTP WE
- CEGH VTP BH
- ZTP DA
- ZTP WE
- ZTP BH
- CZ VTP DA
- CZ VTP WE
- CZ VTP BH

The Calculation Period is the period during which the PEGAS Spot EOD price references are determined. During this period, Powernext SAS collects gross data necessary for the determination of the PEGAS Spot EOD price references. These PEGAS Spot EOD price references are determined according to the following methodology.

Step 1: Definition of the Calculation Period Duration

The methodology to determine the PEGAS Spot EOD price references is based on a Calculation Period of 15 minutes **on the last trading day of each contract (for example on Friday only for a standard 2 days Week-End contract)** (Calculation Period Duration). This Calculation Period starts and finishes at the times specified hereunder.

| Product | Calculation Period (Paris time) |
|-------------|------------------------------------|
| PEG WD | 15h45-16h00 |
| PEG DA | 17h15-17h30 |
| PEG WE | 17h15-17h30 |
| PEG BH | 17h15-17h30 |
| TTF DA | 17h15-17h30 |
| TTF WE | 17h15-17h30 |
| TTF BH | 17h15-17h30 |
| NCG DA | 17h15-17h30 |
| NCG WE | 17h15-17h30 |
| NCG BH | 17h15-17h30 |
| GASPOOL DA | 17h15-17h30 |
| GASPOOL WE | 17h15-17h30 |
| GASPOOL BH | 17h15-17h30 |
| ETF DA | 17h15-17h30 |
| ETF WE | 17h15-17h30 |
| ETF BH | 17h15-17h30 |
| CEGH VTP DA | 17h15-17h30 |
| CEGH VTP WE | 17h15-17h30 |
| CEGH VTP BH | 17h15-17h30 |
| ZTP DA | 17h15-17h30 |
| ZTP WE | 17h15-17h30 |
| ZTP BH | 17h15-17h30 |
| CZ VTP DA | 17h15-17h30 |
| CZ VTP WE | 17h15-17h30 |
| CZ VTP BH | 17h15-17h30 |

Table 1 – Schedule of the Calculation Period

Step 2: filtering of orders and trades of sufficient volume

The Minimal Settlement Volume is the minimum volume of a Trade or an Order to be taken into account in the computation of the PEGAS Spot EOD price references.

Both average mid Spreads and Trades (weighted by their volumes) during the Calculation Period are taken into account. **Bid/ask Orders and Trades strictly below certain volumes are not taken into account.** The minimum volumes for Orders and for Trades are indicated in Table 2.

| Product | Minimum Volume |
|-------------|----------------|
| PEG DA | 240 MWh/day |
| PEG WE | 240 MWh/day |
| PEG BH | 240 MWh/day |
| TTF DA | 10 MW |
| TTF WE | 10 MW |
| TTF BH | 10 MW |
| NCG DA | 10 MW |
| NCG WE | 10 MW |
| NCG BH | 10 MW |
| GASPOOL DA | 10 MW |
| GASPOOL WE | 10 MW |
| GASPOOL BH | 10 MW |
| ETF DA | 10 MW |
| ETF WE | 10 MW |
| ETF BH | 10 MW |
| CEGH VTP DA | 10 MW |
| CEGH VTP WE | 10 MW |
| CEGH VTP BH | 10 MW |
| ZTP DA | 10 MW |
| ZTP WE | 10 MW |
| ZTP BH | 10 MW |
| CZ VTP DA | 10 MW |
| CZ VTP WE | 10 MW |
| CZ VTP BH | 10 MW |

Table 2 Minimum volume for Orders and Trades

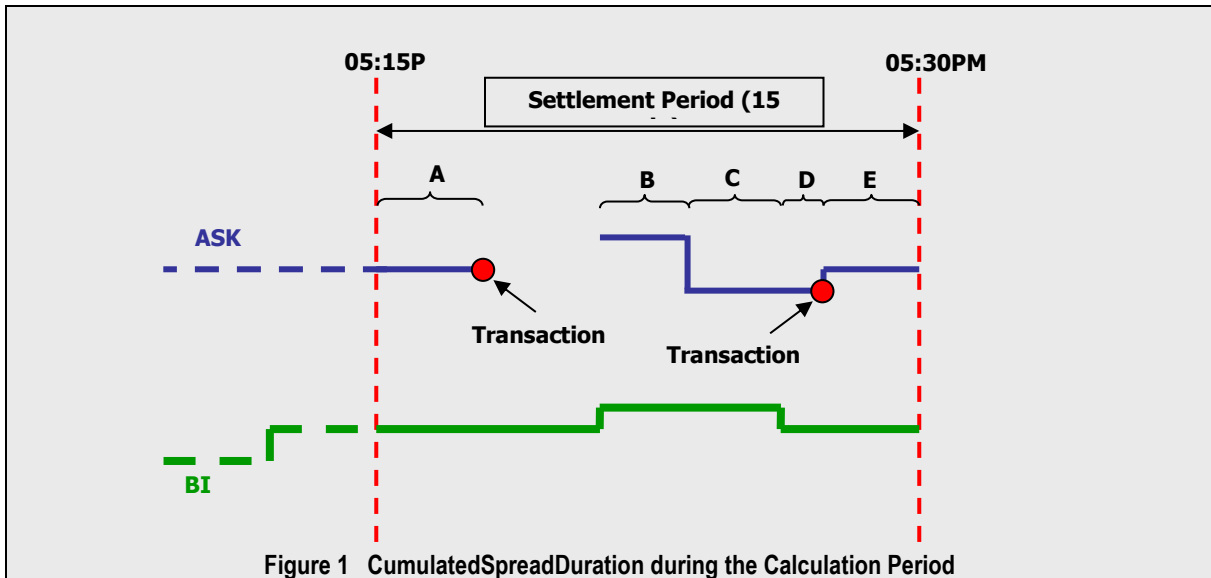
Step 3: determination of the Cumulated Spread Duration

The Cumulated Spread Duration is the cumulated duration of present spreads during the Calculation Period. It is defined as the cumulative time during which **both** ask and bid Orders with sufficient volume (see Table 1) are displayed on screen.

Example

Orders of sufficient volume during the 15 minutes Calculation Period are represented on figure 1. The Calculation Period is decomposed into subperiods that correspond to constant best bid and ask prices. Whenever one of these prices is changing, a new subperiod is created. Intervals during which no bid or no ask Order of sufficient volume are present will be skipped. In figure 1, between periods A and B, there is for example no ask Order (or the ask Orders are all below the minimum volume).

$$\text{CumulatedSpreadDuration} = \text{Duration(A)} + \text{Duration(B)} + \text{Duration(C)} + \text{Duration(D)} + \text{Duration(E)}$$



Step 4: calculation of the AverageAsk and the AverageBid

The Average Ask is the average value of the best ask Orders during the Cumulated Spread Duration.

Example:

If the Cumulated Spread Duration is composed of 5 subperiods A, B, C, D, E:

$$\text{AverageAsk} = [\text{Duration(A)*Ask(A)} + \text{Duration(B)*Ask(B)} + \text{Duration(C)*Ask(C)} + \text{Duration(D)*Ask(D)} + \text{Duration(E)*Ask(E)}] / \text{CumulatedSpreadDuration}$$

The AverageBid is the average value of the best bid Orders during the Cumulated Spread Duration.

Example

If the Cumulated Spread Duration is composed of 5 subperiods A, B, C, D, E:

$$\text{AverageBid} = [\text{Duration(A)*Bid(A)} + \text{Duration(B)*Bid(B)} + \text{Duration(C)*Bid(C)} + \text{Duration(D)*Bid(D)} + \text{Duration(E)*Bid(E)}] / \text{CumulatedSpreadDuration}$$

Step 5: calculation of the Average Mid and Average Spread

The Average Mid is the average between Average Ask and Average Bid:

$$\text{AverageMid} = (\text{AverageAsk} + \text{AverageBid}) / 2$$

The Average Spread is the difference between Average Ask and Average Bid:

$$\text{AverageSpread} = \text{AverageAsk} - \text{AverageBid}$$

Step 6: calculation of the Weighted Average Trade Price

The Weighted Average Trade Price is the average price of the outright Trades (of sufficient volume) weighted by their volumes.

The Synthetic Prices of the Spreads resulting from a Trade on a Spread Product are taken into consideration in the calculation.

Weighted Average Trade Price is the average price of the Trades on a Product weighted by their volumes, including Synthetic Prices of Trades resulting from a Trade on a Spread Product.

Example for PEG

If two trades of sufficient volume are observed on PEG or on a Spread Product on PEG during the Calculation Period:

$$\text{WeightedAverageTradePrice} = \frac{[\text{Price}(\text{Trade1}) * \text{Volume}(\text{Trade1}) + \text{Price}(\text{Trade2}) * \text{Volume}(\text{Trade2})]}{[\text{Volume}(\text{Trade1}) + \text{Volume}(\text{Trade2})]}$$

Step 7: Price Committee triggering conditions

For a given contract, a **Price Committee** is called **if there is no Trade and one of the two following conditions on the Cumulated Spread Duration (condition A) and/or Average Spread (condition B) is not met:**

Condition A (Minimum Cumulated Spread Duration)

$$\text{CumulatedSpreadDuration} \geq 0.2 * \text{SettlementPeriodDuration}$$

For CZ VTP

$$\text{CumulatedSpreadDuration} \geq 0.07 * \text{SettlementPeriodDuration}$$

Condition B (Maximum Average Spread Level)

$$\text{AverageSpread} \leq \text{MaxSpread}[\text{contract}]$$

Max Spread is the maximum average spread value that a Product can have to be taken into account. The Max Spread values for each Product are indicated in Table 3:

| Product | MaxSpread |
|-------------|------------|
| PEG DA | 0,60 €/MWh |
| PEG WE | 0,60 €/MWh |
| PEG BH | 0,60 €/MWh |
| TTF DA | 0,40 €/MWh |
| TTF WE | 0,40 €/MWh |
| TTF BH | 0,40 €/MWh |
| NCG DA | 0,40 €/MWh |
| NCG WE | 0,40 €/MWh |
| NCG BH | 0,40 €/MWh |
| GASPOOL DA | 0,40 €/MWh |
| GASPOOL WE | 0,40 €/MWh |
| GASPOOL BH | 0,40 €/MWh |
| ETF DA | 1,20 €/MWh |
| ETF WE | 1,20 €/MWh |
| ETF BH | 1,20 €/MWh |
| CEGH VTP DA | 0,40 €/MWh |
| CEGH VTP WE | 0,40 €/MWh |
| CEGH VTP BH | 0,40 €/MWh |
| ZTP | 1,20 €/MWh |
| ZTP | 1,20 €/MWh |
| ZTP | 1,20 €/MWh |
| CZ VTP DA | 0,50 €/MWh |
| CZ VTP WE | 0,50 €/MWh |
| CZ VTP BH | 0,50 €/MWh |

Table 3- MaxSpread values (€/MWh)

Example:

- ❖ For a PEG DA Product, if the cumulated time during which there is both bid and ask Orders of more than 240 MWh/day is only two minutes (less than 20% of 15 minutes) and there was no Trade on such Product nor on a Spread Product on PEG DA during the Calculation Period, a Price Committee is called for that Product.
- ❖ For a PEG DA Product, if the average spread is 0.60 €/MWh/d and there was no Trade on this Product nor on a Spread Product on PEG DA during the Calculation Period, a Price Committee is called for that Product.

When a Price Committee is called, Powernext SAS uses the data given by the Price Committee to determine the PEGAS Spot EOD price references of the concerned Products.

Step 8: calculation of the PEGAS Spot EOD

If the conditions triggering a Price Committee are not met, PEGAS Spot EOD price references are determined according to the following rules:

- **If 3 or more Trades** of sufficient volume have occurred during the Calculation Period for that Product (including Trades coming from Spreads on that Product) then:
PEGAS Spot EOD price reference = WeightedAverageTradePrice
- **If 1 or 2 Trade(s)** of sufficient volume has occurred during the Calculation Period for that Product (including Trades coming from Spreads on that Product) **and conditions A and B are satisfied** then:
PEGAS Spot EOD price reference = $(1/4 * \text{AverageMid} + 3/4 * \text{WeightedAverageTradePrice})$
- **If 1 or 2 Trade(s)** of sufficient volume has occurred during the Calculation Period for that Product (including Trades coming from Spreads on that Product) **and one of the conditions (or both of them) A and B is (are) not satisfied** then:
PEGAS Spot EOD price reference = WeightedAverageTradePrice
- **If no Trade** of sufficient volume has occurred during the Calculation Period for that Product (nor Trades coming from Spreads on that Product) **and conditions A and B are satisfied**, then:
PEGAS Spot EOD price reference = AverageMid

Step 9: rounding of the PEGAS Spot EOD price references

PEGAS Spot EOD price references are rounded to three digits.

METHODOLOGY FOR ESTABLISHING PEGAS SPOT REFERENCE PRICES**POWERNEXT® COMMODITIES / PEGAS Spot**
Notice n° COMMODITIES-2018-40
01/11/2018**1) PEGAS Spot WDRP**

The PEGAS Spot WDRP Price references are calculated for the following Products :

- PEGAS Spot PEG
- PEGAS Spot ZTP
- PEGAS Spot ETF
- PEGAS Spot CEGH VTP
- PEGAS Spot TTF
- PEGAS Spot NCG
- PEGAS Spot GPL

The PEGAS Spot WDRP Price references will be calculated every calendar day, taking into consideration trades between 8 am and 6 pm.

Methodology:

After the Trading Session, the PEGAS Spot WDRP price reference is defined as the average of the price of Transactions weighted by their volume on the considered Product(s).

The Synthetic Prices of Transactions resulting from a Transaction on a Spread between Products are taken into account for this calculation.

If no Transaction has happened during the day, then the PEGAS Spot WDRP price reference is defined as being equal to the PEGAS Spot EGSI price reference with the same delivery.

2) PEGAS Spot EGSI

The PEGAS Spot EGSI Price references are calculated for the following Products:

- PEGAS Spot PEG
- PEGAS Spot ZTP
- PEGAS Spot ETF
- PEGAS Spot CEGH VTP
- PEGAS Spot TTF
- PEGAS Spot NCG
- PEGAS Spot GPL
- PEGAS CEGH Spot CZ VTP

The PEGAS Spot EGSI Price references will be calculated every business day in accordance with article 1 of the Business and calendars Market Notice, taking into consideration trades between 08:00 am and 06:00 pm.

Methodology:

After the Trading Session, the PEGAS Spot EGSI price reference is defined as the average of the price of Transactions weighted by their volume on the considered Product.

The Synthetic Prices of Transactions resulting from a Transaction on a Spread between Products are taken into account for this calculation.

If no Transaction has happened during the day, then the PEGAS Spot EGSI price reference is defined as being equal to the PEGAS Spot EOD price reference.

TRADE LIMITS ON PEGAS SPOT

POWERNEXT® COMMODITIES / PEGAS Spot Notice n° COMMODITIES-2015-94 01/12/2016

Pursuant to article 2.4.2 of the Powernext® Commodities Market Rules, Powernext SAS hereby describes the system of trade limits in place on PEGAS Spot.

1. Transmission of trading limits from ECC to Powernext

ECC transmits limits to Powernext SAS and Powernext SAS applies trading limits for the Members that are deemed to have agreed with their Clearing Member to use this functionality. According to ECC Clearing Conditions, the Clearing Member must agree upon trading limits' value with the Member before it is transferred to ECC.

Each Member and Trading Account is identified by Powernext with a Clearing Code given by ECC. For each Member and Trading Accounts, Powernext SAS receives the trading limits data (Initial Limit) identified with Clearing Accounts impacted from ECC, who preliminary received the data from the Clearing Member. A Member for which Powernext SAS has not received any limit from ECC will be considered as unlimited.

As a consequence, Members and Trading Accounts are impacted by the trading limits in accordance with the respective Clearing Accounts. With regards to Third Party trading, trading limits will apply to the Clearing Codes of the Clearing Accounts which are used to clear third party trades.

Powernext SAS receives a daily update of the trading limits from ECC each PEGAS business day as defined by Market Notice, between 4:00 and 5:00 pm CET. This update is applied on PEGAS Spot. The daily update will not apply on the Orders already in the Orderbook. These Orders will remain active until withdrawn from the trading system (matched or manually removed by the trader or by Powernext SAS).

2. Application rules of the trading limits on PEGAS Spot

Powernext SAS applies the trading limit received from ECC for a given Member to each buy Order entered or executed on PEGAS Spot. Orders and Transactions which are not compliant with the trading limit are not accepted into the trading platform. Every business day at 4:00 pm CET (ECC booking cut), the limit is reset to the Initial Limit.

The cash trading limits is set in Euro. The value of Orders and Transactions not denominated in Euro as defined in the Market Notice Fees, Charges, Invoices, VAT is converted according to the Central European Bank currency rate.

A Member's Available Limit is defined as the difference between the Initial Limit and the exposure of all working Orders, plus the net payment from all Transactions executed since the last ECC booking cut. The net payment is floored at zero so that the Available Limit cannot exceed the Initial Limit value.

$$\text{Available Limit} = \text{Initial Limit} - \text{Max}(\text{Net Payment Amount of Transactions}; 0) - \text{Exposure of Orders}$$

The financial exposure of a working Order is defined as the net payment amount due by the Member that may result from the Order's execution. For Orders that may result in a payment towards the Member, the financial exposure is defined as zero. Considering all Transactions executed on PEGAS Spot since the last ECC booking cut allows sell Transactions to offset buy Transactions concluded in the same time frame.

The below table recaps what effects trading actions will have on the Available Limit:

| Action | Impact on the Available Limit | Comment |
|-------------------------|-------------------------------|--|
| Buy Order entry | ↓ | Only allowed if the Available Limit remains ≥ 0 |
| Sell Order entry | = | Always allowed |
| Buy Order cancellation | ↑ | Always allowed |
| Sell Order cancellation | = | Always allowed |
| Buy Order is traded | = | Exposure already considered when the Order is posted |
| Sell Order is traded | ↑ | Only vs. buy trades performed since the last ECC booking cut |
| Buy Transaction | ↓ | Only allowed if the Available Limit remains ≥ 0 |
| Sell Transaction | ↑ | Only vs. buy trades performed since the last ECC booking cut |

Orders on Spreads between Products will be considered for their own value. Buy Orders at a negative price are handled like regular sell Orders, and sell Orders at a negative price are handled like regular buy Orders.

Iceberg Orders are considered for their visible quantity only. When the iceberg Order is executed, the new visible quantity will be considered as a new Order and checked against the updated trading limit.

Cancellations of Transactions always prevail against the value of the Available Limit.

Members can contact the Operating Support as defined in the Parameters Setting Notice in case they need to know their Available Limit.

3. Procedure and consequences in case of technical problem

As stated in Article 2.4.2 of the Powernext® Commodities Market Rules, in case a technical problem preventing Powernext from checking the compliance of Orders with the trading limits occurs, Powernext will communicate as soon as possible on such technical problem to the Members who will still be required to comply with their trading limit. In those cases, Powernext declines all responsibilities if the Member does not comply with its limits.

AUCTION TRADING SESSION ON PEGAS CEGH VTP WITHIN-DAY**POWERNEXT® COMMODITIES / PEGAS Spot**
Notice n° COMMODITIES-2017-45
05/09/2017

Auctions on CEGH VTP Within-Day are performed to allow the 24/7 balancing on CEGH VTP by the Austrian Delivery Organization.

1. Trading session and phases

PEGAS CEGH VTP Within-Day contracts are offered in Continuous Trading the first 45 minutes of every hour. Auction Trading session in PEGAS CEGH VTP Within-Day contracts are held during the last 15 minutes of every hour.

The beginning and end of Trading sessions are communicated to the members via the Trading System.

The Auction Trading session is organized in the following trading phases:

- Order phase: starting 45 minutes after the beginning of the hour. Members can post orders in the order book. No matching takes place.
- Auction phase: will be run randomly within the last 30 to 10 seconds before the end of the hour. The trading system freezes the order book, performs its priority rule, determines the price and executes the orders.
- After Auction phase: the market is closed in order to allow Members to modify or cancel their Orders. This phase stops 10 seconds after the beginning of the next hour.

After the end of the Auction Trading session, the Within-Day market opens in Continuous Trading.

Orders posted during the trading session and not, or partially, executed will be kept in the Order Book at the end of the Auction Trading session.

2. Order matching

Orders posted on PEGAS CEGH VTP Within-Day before and during the Auction Trading Session can be fully or partially executed during the Auction phase.

Order matching rules ensure that Orders are executed respecting the Price Limit defined in the Orders and according to the price determination rules below.

The price determined by the Trading System follows the following rules :

- (1) Maximization of the executable volume with minimization of the market surplus.
- (2) If several prices are possible, market pressure is evaluated, it is corrected by using the relevant price if the pressure is on the buy or on the sell side.
- (3) If one side market pressure is not relevant, the algorithm will choose the price that is the closest to the Reference Price provided by Powernext.

All the Orders executed at the Auction are matched automatically at a unique price according to the price determination rules.

3. The Reference Price

The Reference Price used by Powernext will be the last available CEGH VTP EGSI Reference Price (formerly DAP Reference Price), computed every business day for the Day-Ahead and Weekend contracts.