

GUIDELINE

Solactive Natural Gas Front Month MD Rolling Futures Index ER

Version 1.1 dated April 13th, 2017



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This document contains the underlying principles and regulations regarding the structure and the operating of the Solactive Natural Gas Front Month MD Rolling Futures Index ER (the “Index”). Solactive AG shall make every effort to implement regulations. Solactive AG does not offer any explicit or tacit guarantee or assurance, neither pertaining to the results from the use of the Index nor the Index value at any certain point in time nor in any other respect. The Index is merely calculated and published by Solactive AG and it strives to the best of its ability to ensure the correctness of the calculation. There is no obligation for Solactive AG – irrespective of possible obligations to issuers – to advise third parties, including investors and/or financial intermediaries, of any errors in the Index. The publication of the Index by Solactive AG is no recommendation for capital investment and does not contain any assurance or opinion of Solactive AG regarding a possible investment in a financial instrument based on this Index.

Introduction

This document is to be used as a guideline with regard to the composition, calculation and management of the Index. Any changes made to the guideline are initiated by the Committee specified in section 1.6. The Index is calculated and published by Solactive AG. The name “Solactive” is copyrighted.

1 Index specifications

The Solactive Natural Gas Front Month MD Rolling Futures Index ER (the “Index”) is an Index of Solactive AG and is calculated and distributed by Solactive AG.

The index tracks the performance of the front month Natural Gas future and rolls the exposure over four days from the Active Contract into the Next Active Contract.

The Index is calculated as an Excess Return Index and published in US Dollar.

1.1 Short name and ISIN

The Index is distributed under ISIN DE000SLA28Z2; the WKN is SLA28Z. The Index is published in Reuters under the code <SOLCNGER> and in Bloomberg under the code <SOLCNGER Index>.

1.2 Initial value

The Index is based on 7862.22 at the close of trading on September 30, 2014.

1.3 Distribution

The Index is published via the price marketing services of Boerse Stuttgart AG and is distributed to all affiliated vendors. Each vendor decides on an individual basis as to whether he will distribute/display the Index via his information systems.

1.4 Prices and calculation frequency

The price of the Index is calculated on each Trading Day based on the settlement prices on the respective Exchanges on which the Index Components are listed. The most recent settlement prices of all Index Components are used. Should there be no current settlement price available, the most recent settlement price on Reuters for the preceding Trading Day is used in the calculation.

The Index is calculated once a Business Day at 4:30pm, EST. In the event that data cannot be provided to Reuters or to the pricing services of Boerse Stuttgart AG the Index cannot be distributed.

Any incorrect calculation is adjusted on a retrospective basis.

1.5 Weighting

The Weighting of the futures in the index is done according to Section 2.

1.6 Decision-making bodies

A Committee composed of staff from Solactive AG is responsible for decisions regarding the composition of the Index as well as any amendments to the rules (in this document referred to as the “Committee“ or the “Index Committee”). The Committee shall also decide about the future composition of the Index. If any Extraordinary Events should occur and the implementation of any necessary adjustments.

Members of the Committee can recommend changes to the guideline and submit them to the Committee for approval.

1.7 Publication

All specifications and information relevant for calculating the Index are made available on the <http://www.solactive.de> web page and sub-pages.

1.8 Historical data

Historical data is available from the index base date on January 3, 2006.

1.9 Licensing

Licences to use the Index as the underlying value for derivative instruments are issued to stock exchanges, banks, financial services providers and investment houses by Solactive AG.

2 Calculation of the Index

2.1 Index formula

The Index Value on Trading Day t is calculated in accordance with the following formula:

$$I_t = I_{t-1} \cdot \left(\frac{CRW_{A,t} \cdot SP_{A,t}}{SP_{A,t-1}} + \frac{CRW_{NA,t} \cdot SP_{NA,t}}{SP_{NA,t-1}} \right)$$

with:

I_{t-1} = Index Value on the Trading Day immediately preceding Trading Day t

$CRW_{A,t}$ = Commodity Roll Weight of the Active Contract on Trading Day t

$CRW_{NA,t}$ = Commodity Roll Weight of the Next Active Contract on Trading Day t

$SP_{A,t}$ = Settlement Price of the Active Contract on Trading Day t

$SP_{NA,t}$ = Settlement Price of the Next Active Contract on Trading Day t

2.2 Roll Period

During the Roll Period the Active Contract is rolled over a four day period into the Next Active Contract. The Roll Period starts on the 4th Trading Day of each month and the Commodity Roll Weight of the Active Contract is decreased by 25% after the Close of Business of each Trading Day of the Roll Period starting at 100% while the Commodity Roll Weight of the Next Active Contract is increased by 25% after the Close of Business of each Trading Day of the Roll Period starting at 0%. After the end of the roll period the Next Active Contract becomes the Active Contract. The roll schedule is listed in Section 4.3.

2.3 Accuracy

The value of the Index will be rounded to 2 decimal places.

2.4 Calculation of the Index in the event of a Market Disruption Event

From time to time, market disruption events may occur that will result in the postponement of the Index and/or the adjustment of the roll period. A Market Disruption Day will be deemed to have occurred if any of the following events occur:

- i. The Daily Contract Settlement Price is not published by the Exchange by 4:00 PM Eastern Time;
- ii. The Daily Contract Settlement Price is erroneous, in the reasonable judgment of Solactive, and such error is not corrected by 4:00pm Eastern Time;
- iii. The Daily Contract Settlement Price is a Limit price (as defined by the applicable Exchange);
- iv. Trading in the relevant contract is disrupted during the trading day and does not trade for at least 30 minutes prior to the scheduled closing time (or rescheduled closing time if the contract closing time is rescheduled)

If any of these events occur on a non-roll date, the Index will not be posted for that Business Day. If any of these events occur on a roll date, the applicable Index will not be posted for that Business Day and the portion of the roll that was to take place

on the Market Disruption Day will take place on the next non-Market Disruption Business Day. For instance, if the Market Disruption Day occurred on the 7th Business Day of the month, the 25% portion that was to be rolled on day 7 will be added to the 25% roll on the 8th Business Day making the total roll 50% on the 8th Business Day.

If the Market Disruption Event continues over a period of eight Trading Days, then the Committee will determine the necessary action (including but not limited to taking into account the market conditions prevailing at this point in time, the last quoted Prices for each of the Index Components as well as any other conditions that it deems relevant for calculating the Index value) such that the affected securities resulting from the Market Disruption Event are no longer causing such disruption to occur.

3. Definitions

“Active Contract” means the contract given in the roll schedule under Section 4.3.

“Trading Day” means any day in which the US commodity market is open and publishes a Contract Settlement Price for the Designated Relevant Contracts and which the Toronto Stock Exchange (“TSX”) is open and publishes closing prices and Canadian Banks are open and have the ability to settle foreign exchange transactions.

“Commodity Roll Weight” means the target weight determined as per Section 2.2.

“Exchange” means the Chicago Mercantile Exchange and the Toronto Stock Exchange.

“Extraordinary Event” is referring to the case if one or more contracts mentioned in the roll schedule under Section 4.3 are not listed anymore.

The **“Index Calculator”** is Solactive AG or any other appropriately appointed successor in this function.

The **“Index Currency”** is USD.

A **“Market Disruption Event”** is defined in section 2.4.

“Next Active Contract” means the contract given in the roll schedule under Section 4.3.

“Roll Period” means a roll period as defined in Section 2.2.

4 Appendix

4.1 Contact data

Information regarding the Index concept

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4.2 Calculation of the Index – change in calculation method

The application by the Index Calculator of the method described in this document is final and binding. The Index Calculator shall apply the method described above for the composition and calculation of the Index. However it cannot be excluded that the market environment, supervisory, legal, financial or tax reasons may require changes to be made to this method. The Index Calculator may also make changes to the terms and conditions of the Index and the method applied to calculate the Index, which he deems to be necessary and desirable in order to prevent obvious or demonstrable error or to remedy, correct or supplement incorrect terms and conditions. The Index Calculator is not obliged to provide information on any such modifications or changes. Despite the modifications and changes the Index Calculator will take the appropriate steps to ensure a calculation method is applied that is consistent with the method described above.

4.3 Roll Schedule

Active Contract:

Contract/Month	1	2	3	4	5	6	7	8	9	10	11	12	
NG		G	H	J	K	M	N	Q	U	V	X	Z	F+

Next Active Contract:

Contract/Month	1	2	3	4	5	6	7	8	9	10	11	12	
NG		H	J	K	M	N	Q	U	V	X	Z	F+	G+

A “+” defines a contract of the following year. The following naming convention of the contracts holds:

Identifier	Month	Identifier	Month
F	January	N	July
G	February	Q	August
H	March	U	September
J	April	V	October
K	May	X	November
M	June	Z	December

