Natural Gas Monthly Strip

Product Specification Consultation I May 2014

About emsTradepoint

emsTradepoint is a physical commodity exchange designed to provide a liquid, transparent and widely accessible trading platform to the energy industry.

emsTradepoint's trading venue - the Exchange Platform - opened in 2013 with its first listing; a natural gas contract for physical delivery at the Frankley Road Hub in New Zealand.

For more on emsTradepoint, please visit www.emstradepoint.co.nz

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Submissions are required by 20 June 2014.

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1. Purpose

The purpose of this paper is to set out the proposed contract specification for a listed Natural Gas (Physical) Monthly Strip contract and seek feedback from current and potential emsTradepoint (**eTP**) Participants. This paper also seeks comments on force majeure options for the monthly strip product.

Submissions are on a no commitment basis and are used to inform eTP's decision-making for the monthly strip product.

2. Background

eTP currently lists the Natural Gas (Physical): Frankley Road (**NGP:FR**) contract on a daily basis for up to six months in advance. This contract is primarily designed as a short-term flexibility product, but can also be used to construct mid-term strategies.

eTP has been made aware of Participants' desire to be able to trade a monthly package of the daily NGP:FR contract, i.e. a 'strip' of daily trades aggregated into a calendar month package. The execution of a monthly strip product would be the same as for the existing daily product aside from a trade being for a full month of a set daily volume instead of a single day.

3. Submissions

If you wish to make a submission to eTP on the proposed monthly strip product, answers to the following questions will assist in our evaluation:

1.	Would your organisation consider using a monthly strip? Would your organisation consider using any other strip duration (balance of week / weekly / business day week / weekend / balance of month / quarter) and, if so, which duration is more important to you?
2.	On the draft NGP:FR Monthly Strip specification set out in Section 4 of this paper, is there anything you would change? For example: - Are the lot and tick sizes suitable? - Is the contract window appropriate?
3.	Of the force majeure options set out in Sections 6 to 9 of this paper, which is your organisation's preference and why?
4.	Is there anything else you think would be important to consider regarding the proposed monthly strip product?

Please deliver submissions to:

Joe Sant – joe.sant@emstradepoint.co.nz by **20 June 2014**.

4. DRAFT Monthly Strip Product Specification

Product	Natural Gas Physical – Frankley Road Monthly Strip DRAFT
Code	**NGP-FR Month**
Commodity	Gas
Venue	emsTradepoint Exchange Platform
Trading Hours	0900 – 1800 (NZST)
Network Code	Vector Transmission Code
Contract Unit	Gigajoule (GJ)
Pricing Quotation	New Zealand dollars and cents per GJ
Lot Size	1 GJ per day, quoted per day For example, the size (in GJ) of a 1 GJ NGP:FR Month contract will vary depending on the number of days within the applicable month, as follows: • A 28 day 1 GJ monthly strip will equate to 28 GJ in total • A 29 day 1 GJ monthly strip will equate to 29 GJ in total • A 30 day 1 GJ monthly strip will equate to 30 GJ in total • A 31 day 1 GJ monthly strip will equate to 31 GJ in total
Tick Size	$0.01 (1.0¢) per GJ For example, the tick size (in $) of a 1 GJ NGP:FR Month contract will vary depending on the number of days within the applicable month, as follows: • A 28 day 1 GJ monthly strip will have minimum tick size of $0.28 • A 29 day 1 GJ monthly strip will have minimum tick size of $0.29 • A 30 day 1 GJ monthly strip will have minimum tick size of $0.30 • A 31 day 1 GJ monthly strip will have minimum tick size of $0.31
Maximum Contract Price	None
Minimum Contract Price	None
Hub Location	emsTradepoint Frankley Road Hub
Delivery/Receipt	Delivery and Receipt in accordance with the Network Code
Contract Window	Next full month plus up to the next 24 months. New end month will be opened for trade on the second Wednesday of the current month
Settlement Type	Physical only
Grade and Quality Specifications	New Zealand Standard Specifications for Reticulated Natural Gas NZS 5442:2008 as amended and replaced from time to time
Market Rules	This Product is subject to the Market Rules of emsTradepoint, as amended from time to time
Force Majeure	Yes, in accordance with Rule XX

5. Force Majeure

Due to longer commitment periods and likely larger volumes that would be established under a monthly strip product (as compared to the NGP:FR daily product), the ability for a Participant to call force majeure relief must be considered. The key consideration for eTP is to design any such force majeure rules to best enable tradability and liquidity of the monthly strip product.

For any force majeure option the following will apply:

1. Force majeure will only be applicable against volume sold as a monthly strip and will not apply to the NGP:FR daily product.
2. Force majeure will only be assessed against the net traded quantity.
3. Force majeure will only be applied against individual affected days within the calendar month and will not impact the residual delivery obligations of a monthly strip transaction.
4. Force majeure will not be applicable to intra-day delivery obligations, but will be limited to whole day delivery obligations.
5. Relief can only be sought during true force majeure events and the Participant seeking relief must certify that this is the case.

Four options on how to apply force majeure relief are presented in this paper:

1. **No Force Majeure**
2. **Reverse transaction**
3. **Product-wide suspension**
4. **Scalable option (combination of options 2 and 3)**

Respondents are invited to submit any other force majeure options they consider more appropriate.

6. Option 1: No Force Majeure

Natural gas spot contracts typically do not allow for force majeure relief as it relates to the obligation to deliver or take traded quantities. Instead, traders must liquidate their position by 'trading out' of their net delivery obligation using the market (or face non-performance penalties) should they be unable to satisfy them, for whatever reason.

eTP acknowledges, however, that for this to be workable the supply and demand environment must be highly diversified and granular. eTP is not convinced the New Zealand gas supply chain is sufficiently diverse to allow parties to reasonably trade out of their positions without significantly disrupting the market in general.

An additional consideration is the reality of the affected parties' – the traders on the other side of a force majeure event – ability to satisfy their obligations versus what is possible under the network codes. For example, if there is a production station force majeure event, Section 15 (MPOC) curtailments will limit most (if not all) traders' abilities to satisfy their delivery obligations to eTP.

Option 1 - Pros:	*Option 1 - Cons:*
• *The solution is simple and unequivocal.* • *The daily NGP:FR product is available for recovering positions.* • *Certainty behind delivery of volumes when entering into a trade with the market.*	• *The supply and (possibly) demand environment may not be sufficiently diversified or granular to sustain such a model.* • *Inability to gain force majeure relief may result in divergent instructions between network codes and the obligation to satisfy delivery to eTP.*

7. Option 2: Reverse Transaction

If a party claims force majeure relief, eTP would reflect the reduction in supply/demand by reducing the opposite demand/supply positions by the same amount, allocated on a proportional. These reductions would be executed on the Exchange Platform as transactions in the opposite direction of the affected Participants' net positions.

The counterparty to all trades is always eTP. As such, there exists no connection between individual buyers and sellers, and any reduction in delivery obligations due to force majeure must be reflected evenly across the opposite side. The 'reverse transaction' option is designed to allow a Participant force majeure relief in the fairest and most equitable way possible with sub-options on how price is factored into the reverse transaction.

EXAMPLE:

Trades for delivery tomorrow:

TQ Input

	Traded Quantity	Reverse Buy	Post-FM Delivery Obligation
Seller A	10,000		
Seller B	20,000		
Total	**30,000**	-	-

	Traded Quantity	Reverse Sell	Post-FM Delivery Obligation
Buyer A	5,000		
Buyer B	7,000		
Buyer C	15,000		
Buyer D	3,000		
Total	**30,000**	-	-

Seller A suffers a force majeure event and is unable to deliver its 10 TJ. The buyers are each prorated down against the missing 10 TJ:

Seller FM Model

	Traded Quantity	Reverse Buy	Post-FM Delivery Obligation
Seller A	10,000	10,000	-
Seller B	20,000		20,000
Total	30,000	10,000	**20,000**

	Traded Quantity	Reverse Sell	Post-FM Delivery Obligation
Buyer A	5,000	1,667	3,333
Buyer B	7,000	2,333	4,667
Buyer C	15,000	5,000	10,000
Buyer D	3,000	1,000	2,000
Total	30,000	10,000	**20,000**

OR

Buyer C suffers a force majeure event and is unable to take away 10 TJ of its 15 TJ commitment. The sellers are each prorated down against the missing 10 TJ:

Buyer FM Model

	Traded Quantity	Reverse Buy	Post-FM Delivery Obligation
Seller A	10,000	3,333	6,667
Seller B	20,000	6,667	13,333
Total	30,000	10,000	**20,000**

	Traded Quantity	Reverse Sell	Post-FM Delivery Obligation
Buyer A	5,000		5,000
Buyer B	7,000		7,000
Buyer C	15,000	10,000	5,000
Buyer D	3,000		3,000
Total	30,000	10,000	**20,000**

eTP cannot be left with price exposure. Options for setting the price per GJ of the reverse transactions are as follows:

(a) The $/GJ opportunity cost of the least favourably priced gas of the affected Participants (highest priced trades for a net buyer, who will sell back to the market; and lowest priced trades for a net seller, who will buy back from the market).

- Adds a stronger financial incentive for the Participant calling force majeure to look to the market to fix up volume before calling force majeure.
- Minimises the impact to affected Participants by offering the compensation of trading away their least beneficial volumes.

(b) The $/GJ volume weighted average price (**VWAP**) calculated per affected Participant individually.

- Some price exposure for the Participant seeking force majeure relief exists, although less than pricing option (a).

(c) The $/GJ VWAP calculated from all trades for delivery that day,

- All Participants (including the Participant seeking force majeure relief) have exposure against the market VWAP.
- Potentially the most equitable solution for all Participants.

Option 2 - Pros	***Option 2 - Cons***
• *All parties face the same price risk during a force majeure event.* • *The solution is scalable to the size of the issue.* • *Aligned with network codes.*	• *All participants carry the potential of non-delivery or price exposure to some or all of their volume.*

8. Option 3: Product-Wide Suspension

This option provides force majeure relief by suspending all delivery obligations under the monthly strip product itself, i.e. all deliveries that relate to a monthly strip trade for the day of a force majeure event are terminated. The day-ahead and on-the-day markets remain open to allow Participants with the ability to satisfy delivery to re-position themselves for the day of force majeure (to the extent that is possible).

Financial positions would be adjusted via reverse transaction for the full traded quantity and value of the force majeure day.

Option 3 - Pros:	***Option 3 - Cons:***
• *The solution is simple and unequivocal.* • *The day-ahead and on-the-day markets are available to secure alternative day trades.* • *There is no cost to any party for unwinding positions as all parties are reversed out at their individual VWAP.* • *Aligned with network codes.*	• *100% of a day's volume secured through a monthly strip is removed, now required to be traded in the spot market at a potentially less favourable price.* • *The signal of product suspension may see volatile pricing eventuate for daily trades.* • *May not be efficient as some traded quantities are likely to still be available for delivery.*

9. Option 4: Scalable Option

A fourth option is to invoke the 'reverse transaction' option at times when a force majeure event accounts for less than, say, 50% of total net delivery transacted on the market and the 'product-wide suspension' option when the event effects are larger. This 'scalable' option might prove to be the most efficient solution, depending on achieving reasonable consensus on what percentage of market justifies the product-wide suspension.