



Brentification *noun*

Applying the Brent Template to Overcome Challenges Confronting LNG Commerce



Presented by Kirk Kinnear - GPD Systems, llc @ Gastech Houston 2019

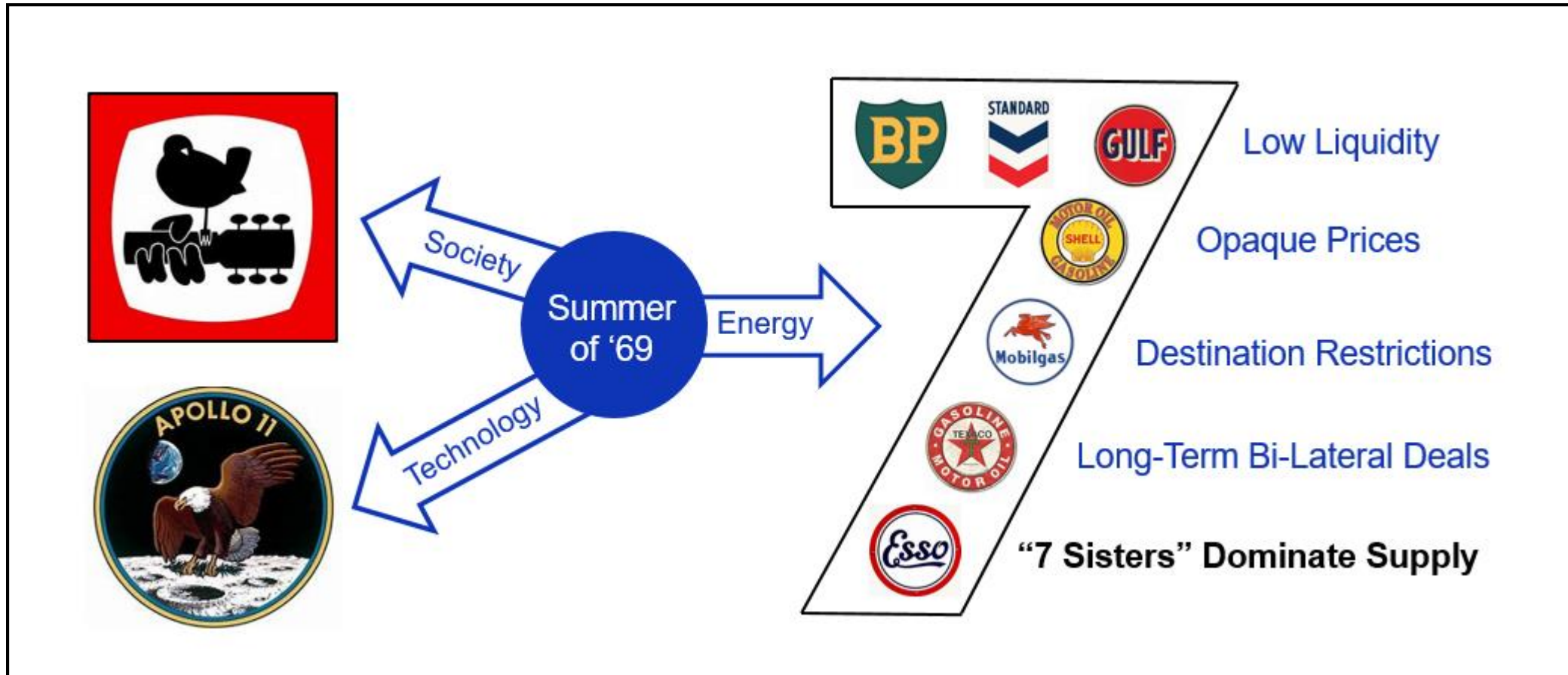


The Story: Why We're Here Today

- Pipeline scheduler, refinery supplier and oil & gas prop trader at leading commodity houses and banks
- Frustrating flaws in the benchmark Brent crude futures contract led me to patent* a solution to overcome them
- Now on a mission of **Brentification**, applying lessons learned in the Brent market to overcome the contract challenges holding back LNG growth
- Why are you attending Gastech S1.10?

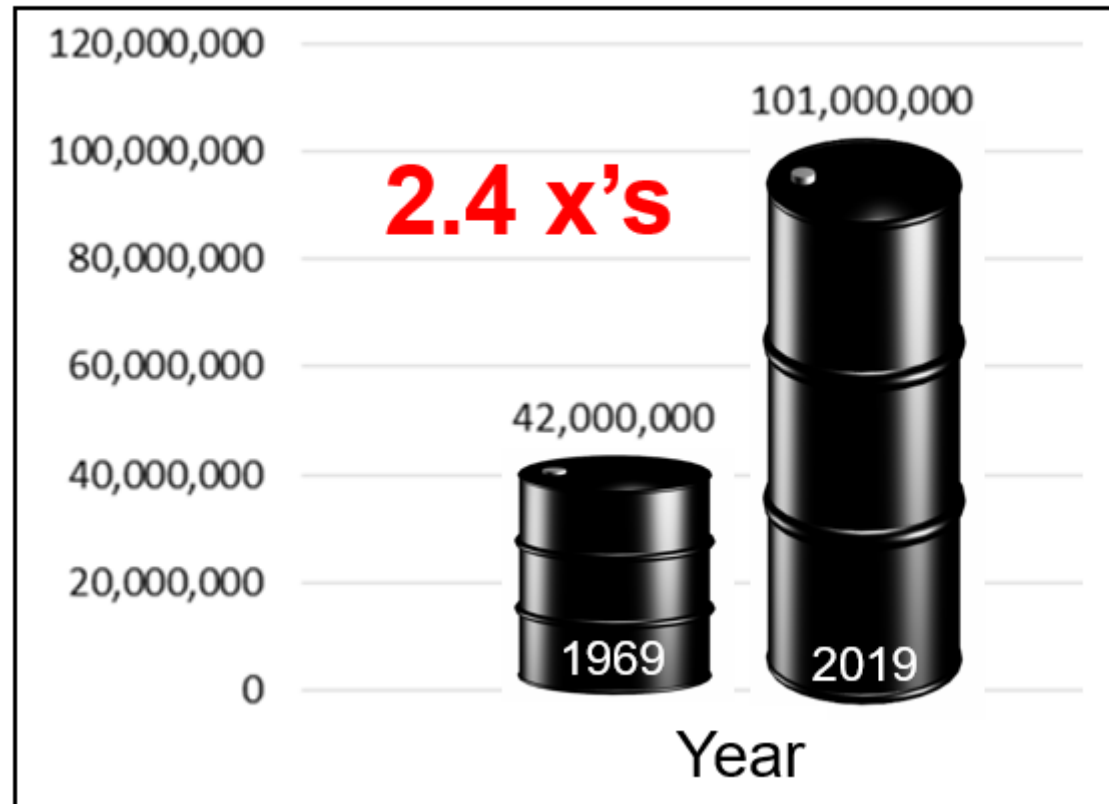


Oil Analogy: LNG Trade Today Similar to Crude 50 Years Ago



Oil's Half Century of Growth: Slow and Steady

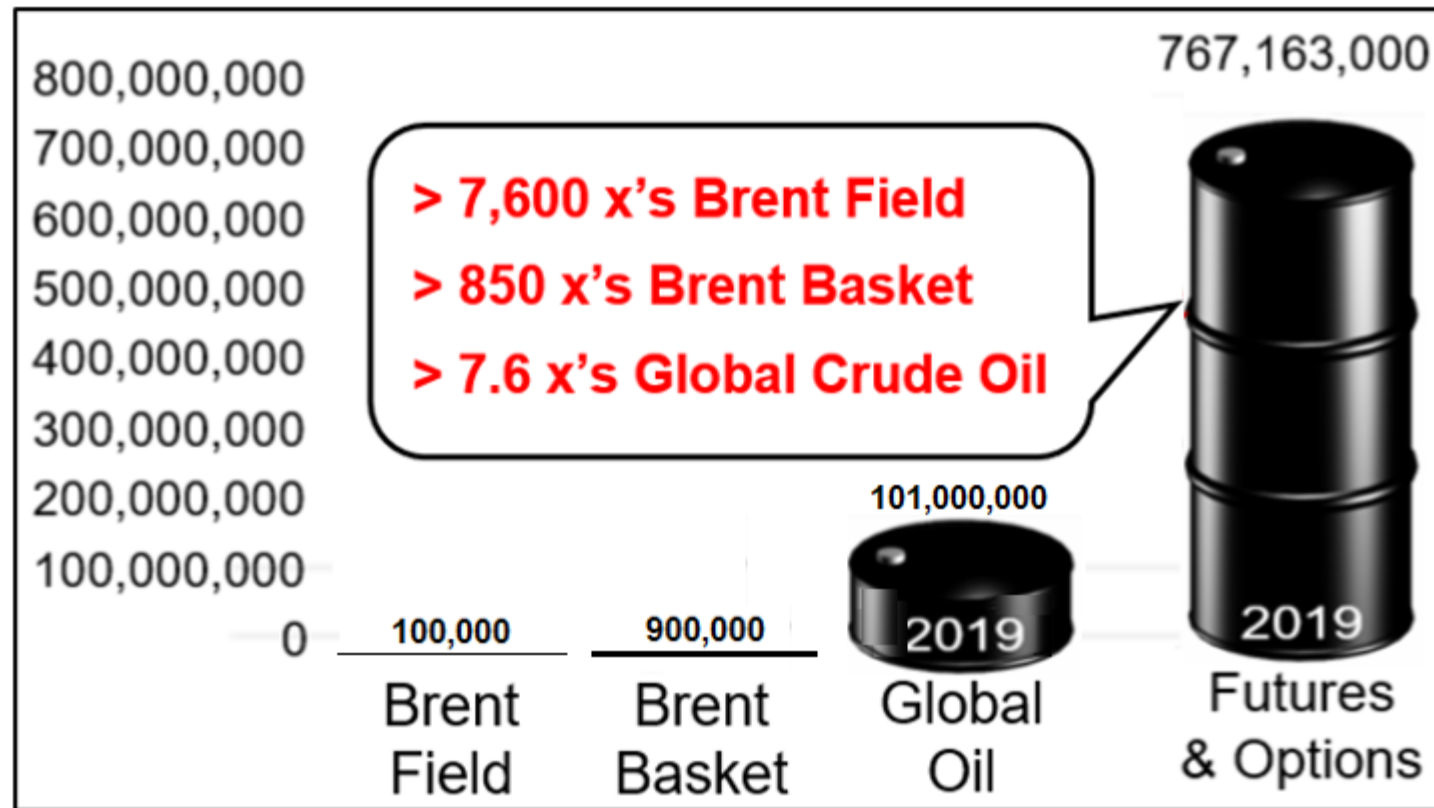
Global Crude Oil Production (Barrels/Day)



While Brent Trade Skyrocketed to New Heights

Actual Production vs. Daily Trading Volume

(Jan-July 2019 Barrels/Calendar Day)



No Need to Reinvent the Wheel

The Brent physical-forward contract template* has 30-years of proven performance in the global marketplace

Seller/Buyer Neutral
General Terms & Conditions (GTCs)



Seller chooses the delivery location from an approved basket of load ports

Title transfers FOB Buyer's vessel at load port



Why is the Oil Trading Model Important? Imagine a Brent-Like LNG Marketplace

The GPD Blueprint for Success

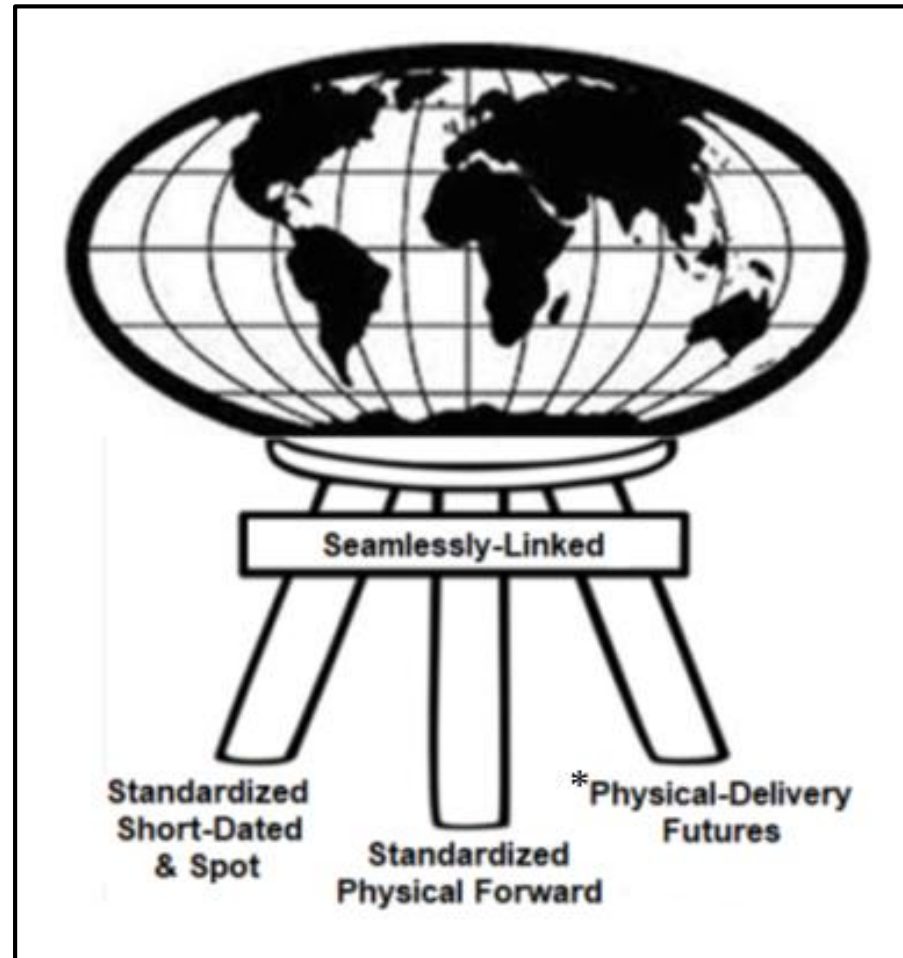


1. Improved trading liquidity & price discovery
2. Reliable supplies and outlets
3. Flexible delivery terms
4. Performance guarantees
5. New risk management tools



The **GPD** Mission: Build a Solid and Scalable Foundation for Global LNG Commerce

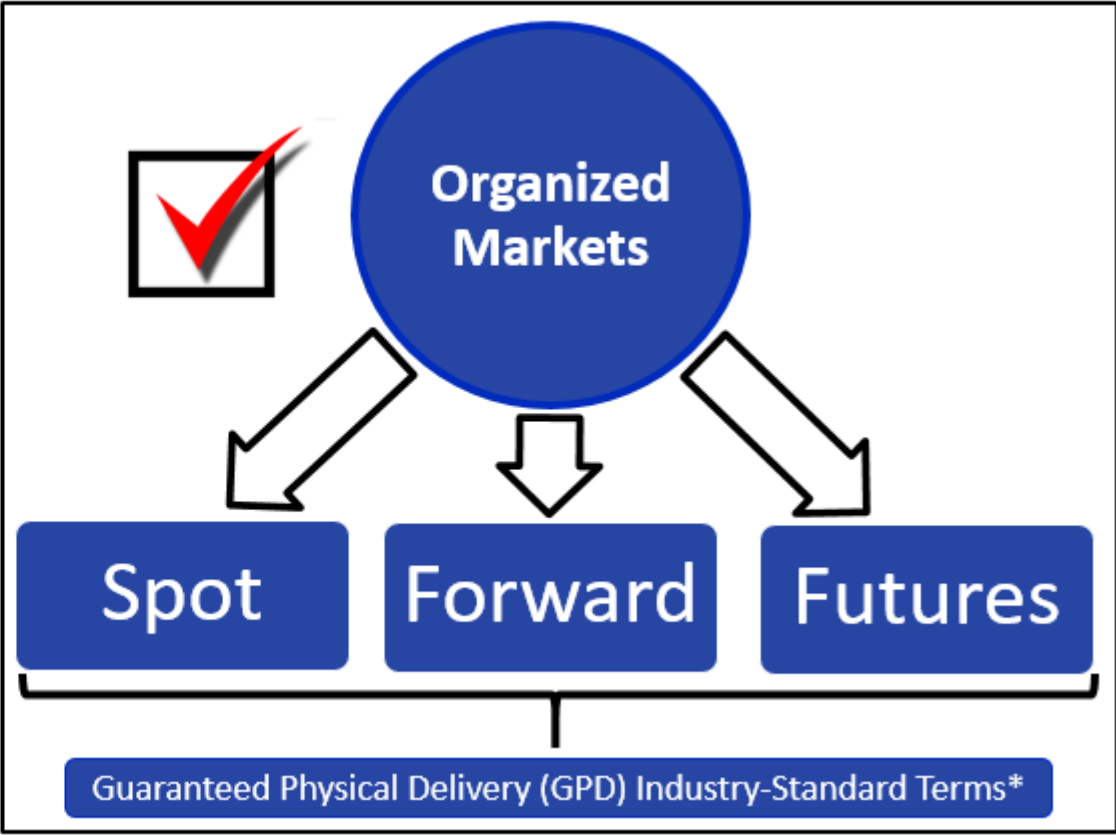
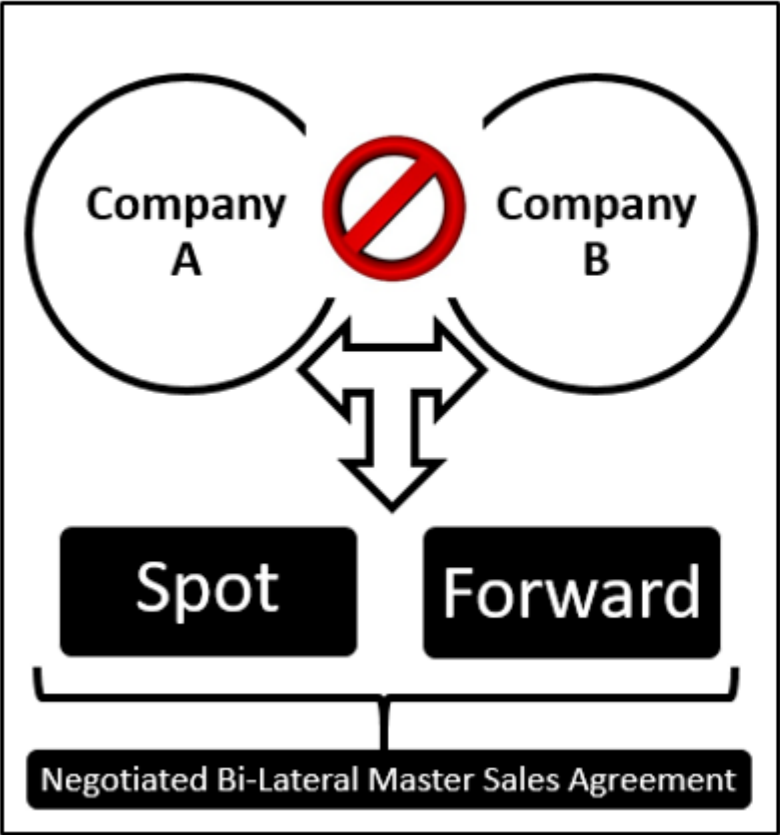
Three-Legged Stool



Contract Model



Start by Agreeing to Industry-Standard Contract Terms for LNG Trading



GPD Standardized LNG Contracts: Details Available Online

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Dated Liquefied Natural Gas (LNG) Listed and OTC Swaps
 Dated LNG vs. Physical Forward LNG
 Daily CFD Future Contract Specifications &
 Dated LNG vs. First Month LNG
 Daily DFL Contract Specifications

	CFD	DFL (OTC)
Contract Unit	10,000 mmbtu	10,000 mmbtu
Price Quotation	US dollars and cents per mmbtu	US dollars and cents per mmbtu
Trading Hours	01:00 AM - 11:00 PM BST Sunday Open 11:00 PM BST	Not applicable.
Minimum Price Fluctuation	\$0.001 per mmbtu	\$0.001 per mmbtu
Listed Contracts	Daily contracts listed for 13 consecutive weeks	Not applicable
Settlement Method	Financial	Financial
Floating Price	The Floating Price for each LNG Contract for Differences (CFD) contract is the daily mid-point between the high and low quotations from the PRA for the CFD assessment which is based on Dated LNG month ahead LNG cash price for each business day that both prices are determined during the contract day.	The Floating Price for each LNG Dated to Front-Line Futures (DFL) contract is the daily mid-point between the high and low quotations from the PRA for the DFL assessment which is based on Dated LNG month ahead LNG cash price for each business day that both prices are determined during the contract day.
Termination of Trading	Trading terminates at 11:00 PM BST on the contract day.	Trading terminates on the contract day.

GPD Systems, llc Agreement for the Sale of LNG on One Full-Month Terms
 Part 2
 General Conditions
 June 2019
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DRAFT

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2. DELIVERY
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4. PRICE
5. PAYMENT
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7. BUYER'S DUTY TO PROVIDE A VESSEL
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17. ADDITIONAL CONDITIONS. TERMINATION
18. APPLICABLE LAW
19. ASSIGNMENT
20. NO WAIVER
21. BOOK-OUT
22. NOTICES
23. LIMITATION OF LIABILITY
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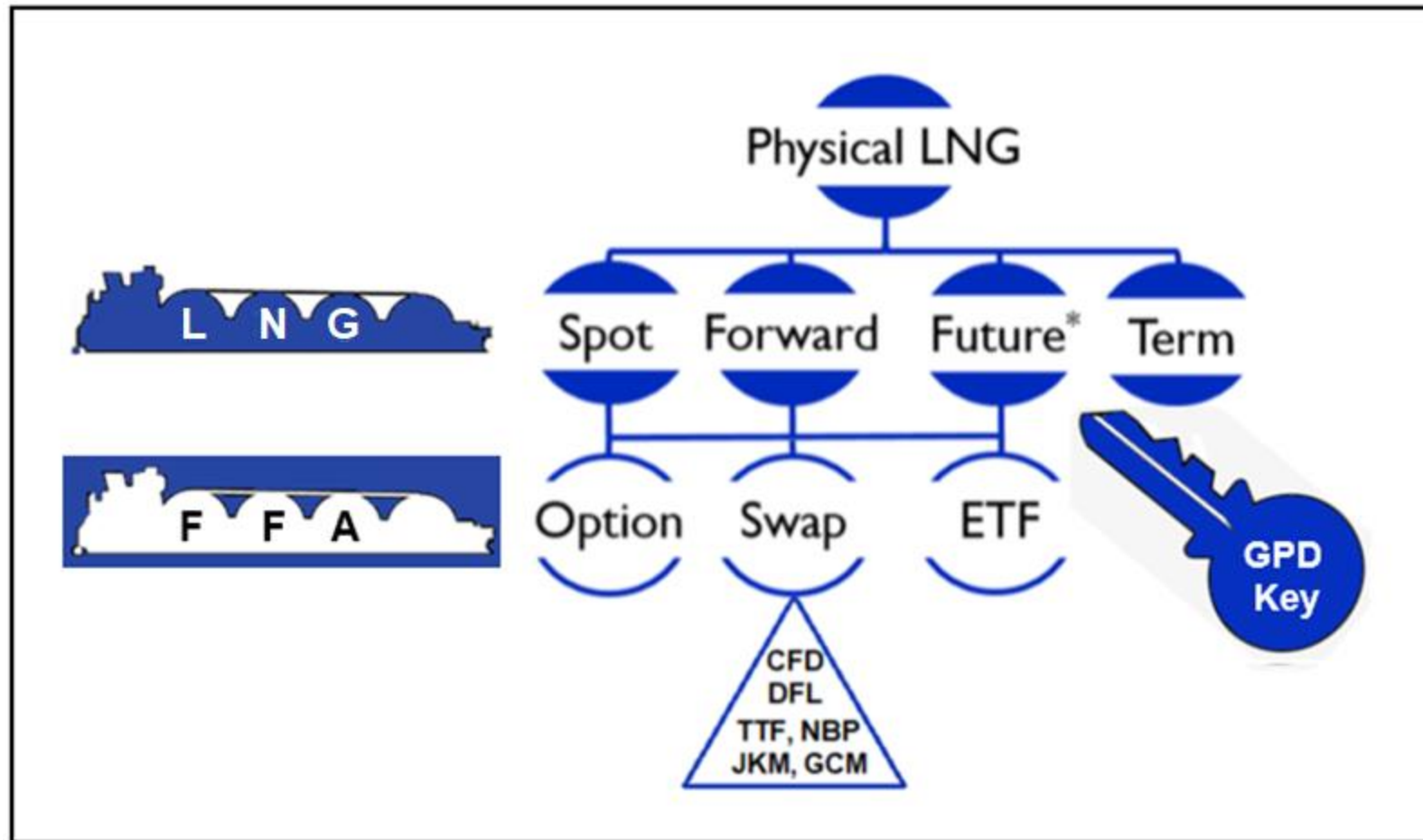
APPENDICES
 A. IRREVOCABLE DOCUMENTARY LETTER OF CREDIT
 B. IRREVOCABLE STANDBY LETTER OF CREDIT
 C. LETTER OF INDEMNITY
 D. REQUIREMENTS FOR VESSELS USING THE APPROVED LOADING TERMINALS

Liquefied Natural Gas (LNG) Futures Contract Specifications
DRAFT GPD Systems, llc

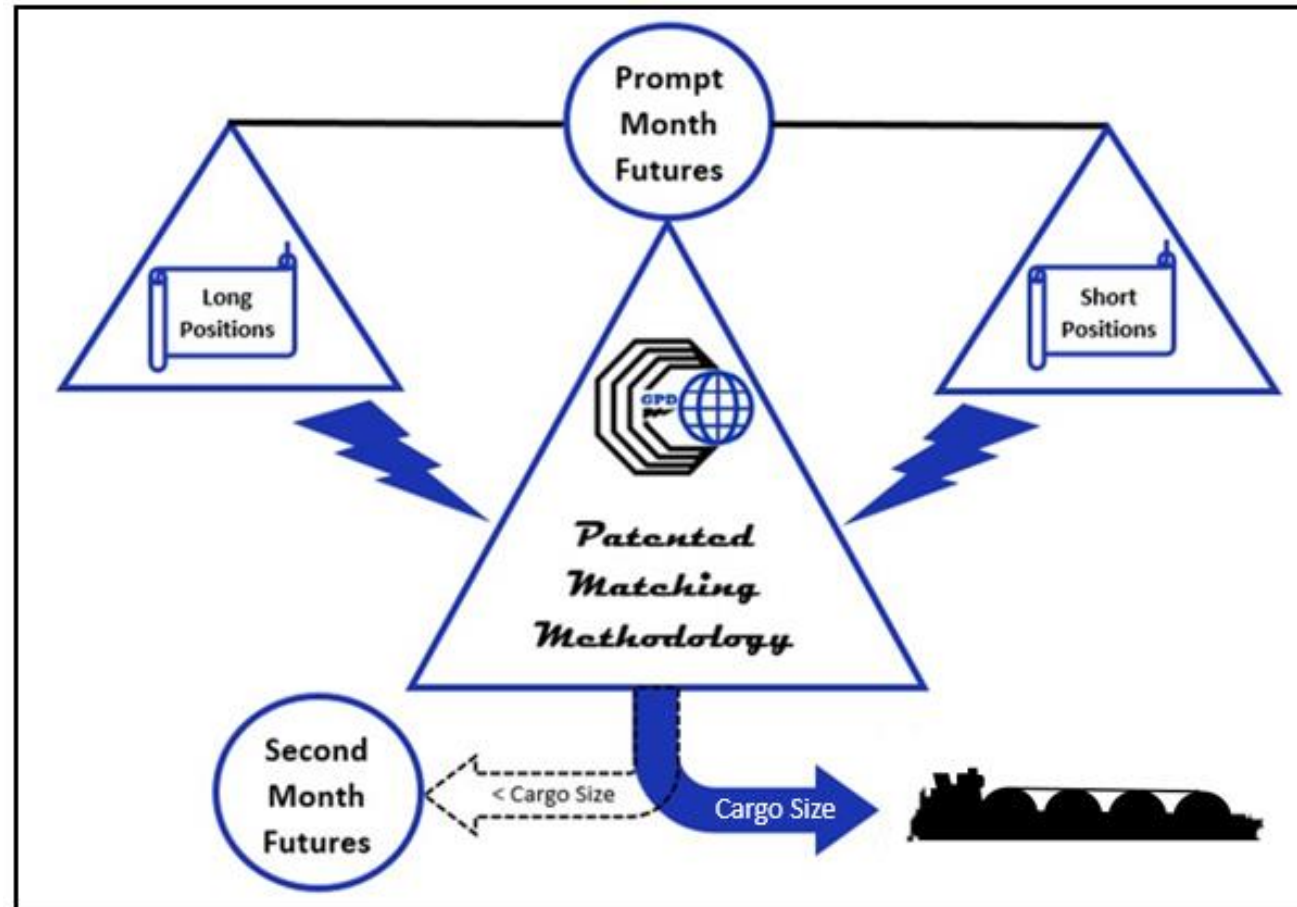
Contract Unit	10,000 million British thermal units (mmbtu).
Price Quotation	U.S. dollars and cents per mmbtu.
Trading Hours	01:00 AM - 11:00 PM BST Sunday Open 11:00 PM BST.
Minimum Price Fluctuation	\$0.001 per mmbtu.
Listed Contracts	The current year plus the next twelve calendar years. A new calendar year will be added following the termination of trading in the December contract of the current year.
Daily Settlement Method	The weighted average price of trades during a two minute settlement period from 19:28:00 London time.
Final Settlement Method	Guaranteed Physical Delivery for post-expiry First-Nearby month Cargo-Size position holders. (Less than Cargo-Size position holders in the post-expiry First-Nearby month will have positions adjusted by the Exchange Clearinghouse in one of the following ways: 1) Less than Cargo-Size First-Nearby month positions matched for physical delivery will have positions increased to Cargo-Size at the Final Settlement Price, and will receive an equal, but opposite position in Cargo-Size at the Final Settlement Price, and 2) Less than Cargo-Size position holders not matched for physical delivery will have their First-Nearby month position reduced to zero, and re-established in the Second-Nearby month at the Final Settlement Price adjusted by the Spread Index.)
Cargo-Size	3,250,000 mmbtu (325 futures lots).
Termination of Trading	Trading shall cease at the end of the designated settlement period on the second to last Business Day of the second month preceding the relevant contract month (e.g. the March contract month will expire on the second to last Business Day of January).



The GPD Patent*: Guaranteed Physical Delivery Futures

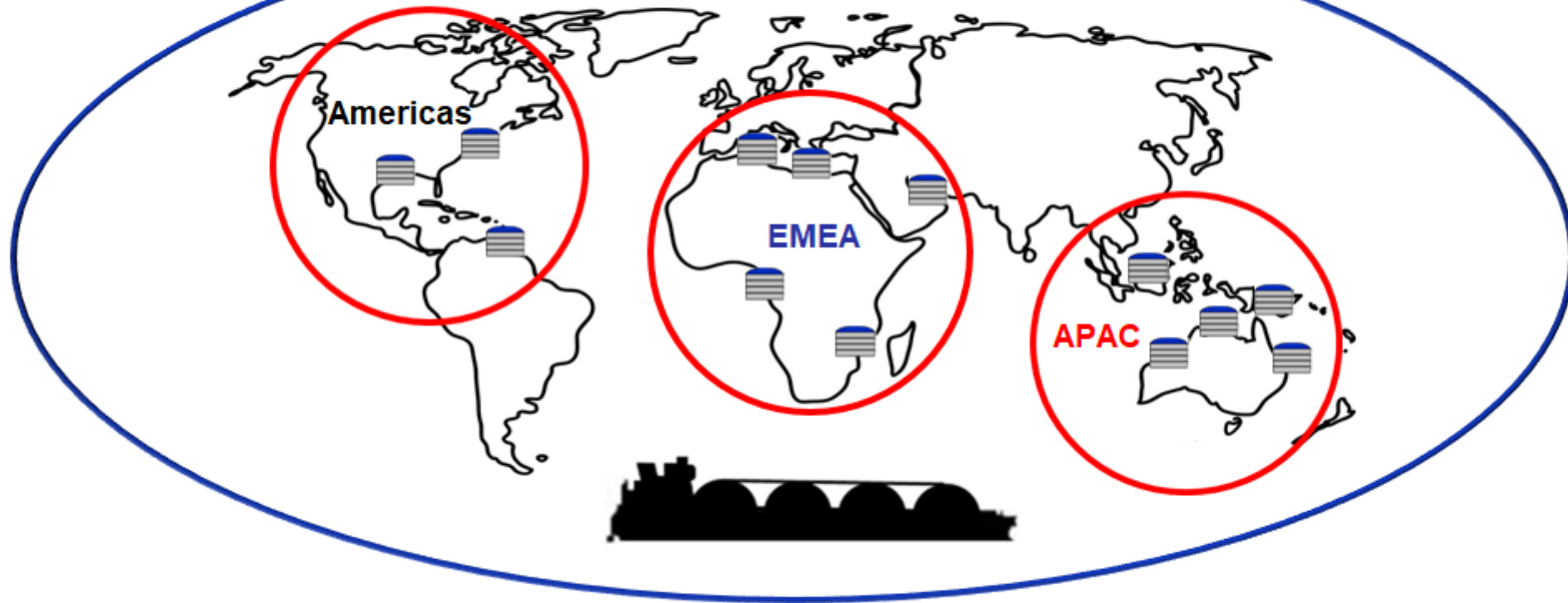


The GPD Post-Expiry Futures Position Matching Engine



GPD LNG Futures: Load Port Baskets

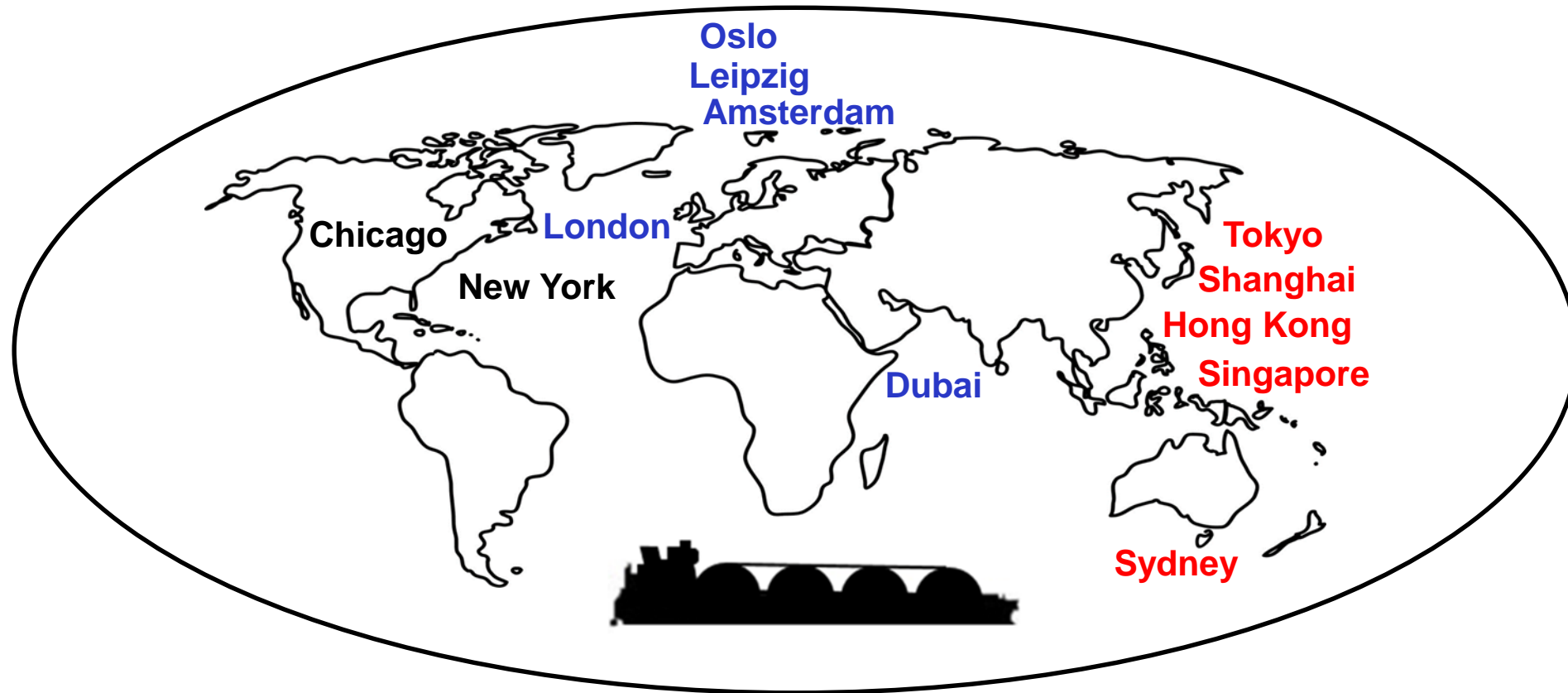
One **Global** Benchmark and/or **Regional** Listings



 - Tanker Load Ports



Home of the **GPD** LNG Futures Contract: Candidate Cities



Dream Big: **Brentification** is the Answer

Imagine a LNG marketplace 100x's or 1,000x's larger than today!

Regional **JKM**, TTF, NBP or GCM paper swaps
can never be the global LNG benchmark

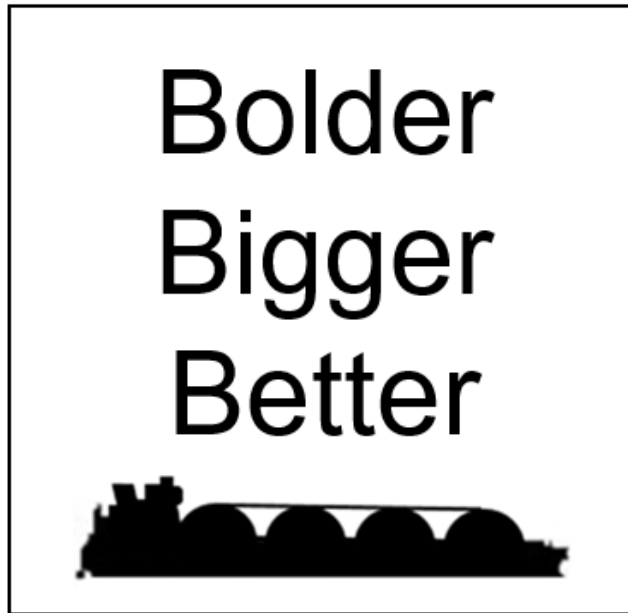
June 2019	JKM LNG Swap	Brent Future
1 Lot	10,000 mmBtu	1,000 Barrels
1 Cargo Size Lot	300	600
Lots Traded/Cal Day	1,425	732,380
Cargo Equiv. Traded/Cal Day	5	1,221
BOE Traded/Cal Day	~2,500,000	732,380,000



The **Brentification** of LNG:

A Win-Win for All Natgas Stakeholders

A global LNG marketplace built on the modified Brent contract template



- ✓ Gas Producers & Consumers
- ✓ Futures Exchanges
- ✓ Processors & Ship Builders
- ✓ Traders & Hedge-Funds
- ✓ Banks & Law Firms
- ✓ Price Reporting Agencies
- ✓ Futures & OTC Brokers
- ✓ Cleaner Energy Advocates
- ✓ Regulators/Taxing Bodies



Together We Can Make This Happen!

“Forward-thinking futures exchanges don’t fear cannibalization, they embrace innovation”



Building a “bigger tent” for diverse
natgas stakeholders worldwide.



Let the **GPD** blueprint make your
LNG dreams come true!

