

X-LNG CASE STUDY · OCT 2025

Simulated SPA Negotiation

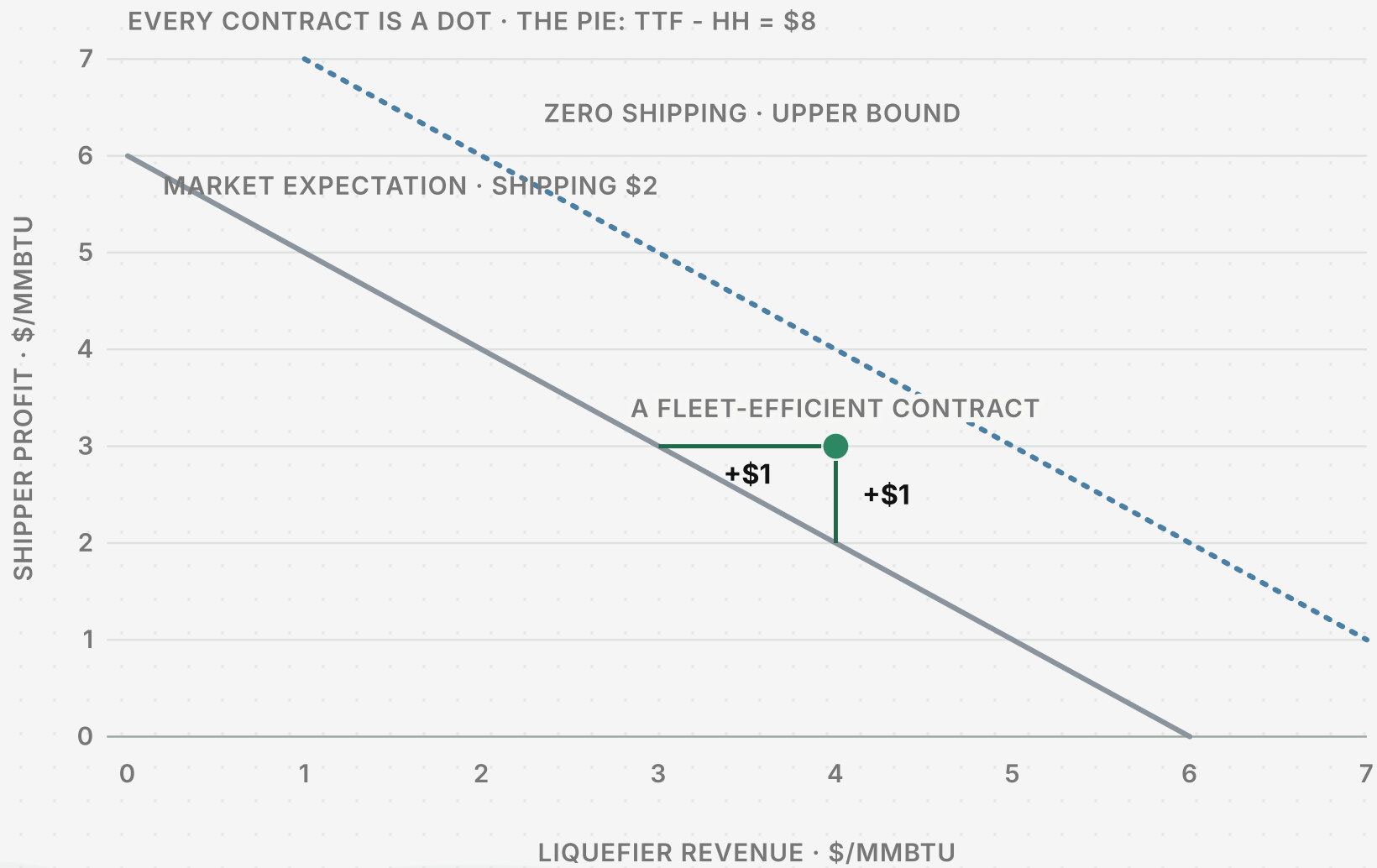
\$40M

what a \$0.50/MMBtu information edge is worth over a single Calcasieu Pass SPA

4,000 contracts · 5 volume ranges x 4 adders **200 MC price sets** · per combination **Fleet modelling** · the information advantage

The pie both sides split

TTF - HH = liquefier revenue + shipper profit + shipping cost · the adder is the negotiation



PRICE FORMULA 115% HH + ADDER · MARKET LINE ILLUSTRATIVE, AS IN THE SOURCE STUDY

Classic pricing strategies only slide the split along the market line. A contract that fits the fleet cuts the cost slice itself, moving the deal above the line.

A simulated liquefier meets a simulated shipper

Calcasieu Pass, Louisiana: two operational terminals and a 100+ mtpa development pipeline

5

vessels: 3 owned + 2 TC-in

44

long cargoes: Nigeria, Sabine Pass,
Qatargas, Arzew, Coral South

62

short cargoes across 7 terminals

\$188.8m

shipper prior P&L · forwards 2025-2027

The contract on the table: a new Calcasieu Pass FOB Long, 24 cargo dates with 4-day loading windows, priced at **115% HH plus an adder**, cancellation fee \$1M per cargo. Five volume ranges from tight (3.2 to 3.3M MMBtu) to wide (2.7 to 3.8M), four adders from \$3.00 to \$4.50. **Exact prior P&L: \$188,845,264.**

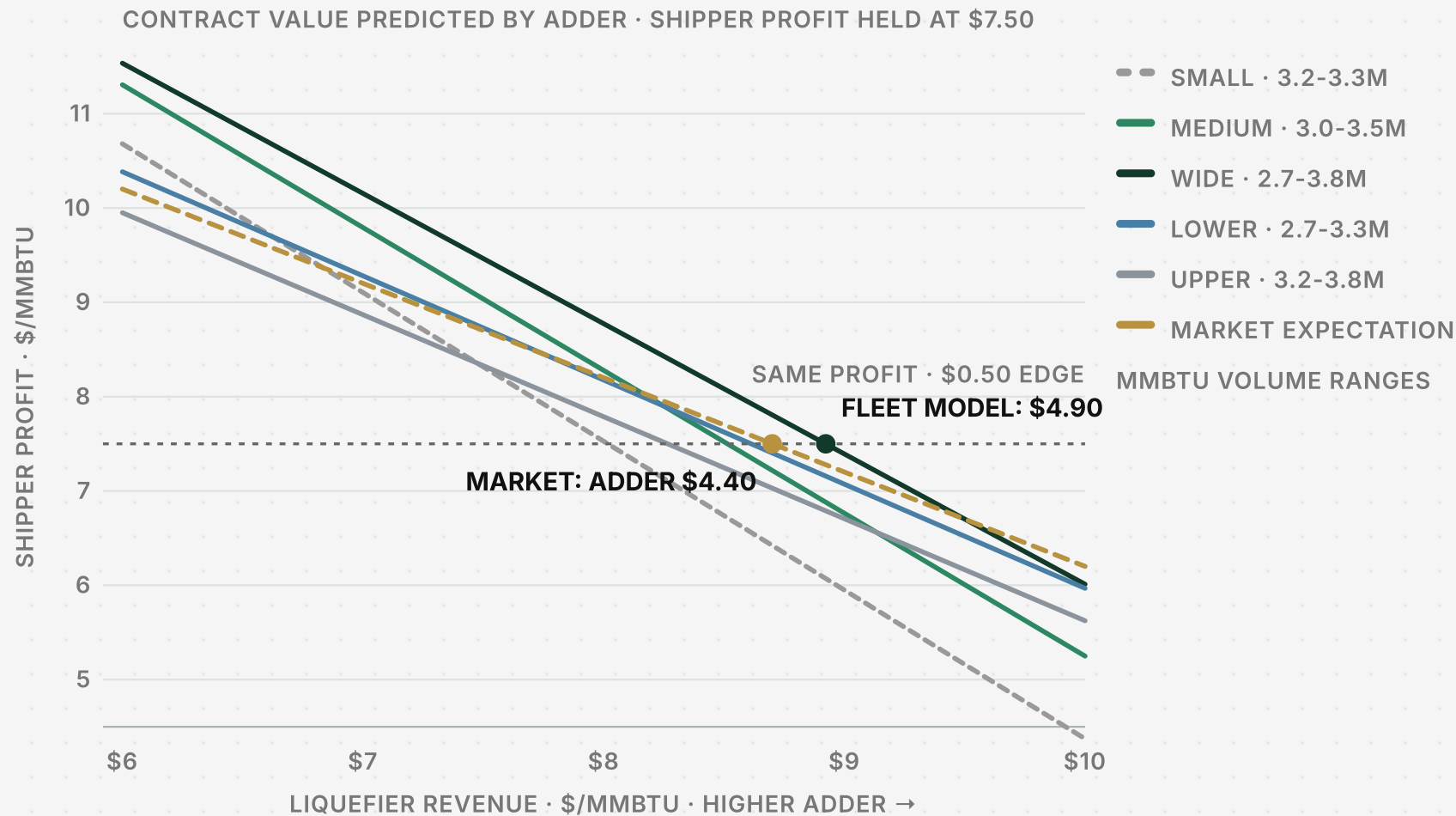
The simulation

5 volumes x 4 adders x 200 Monte Carlo price sets = 4,000 contracts, Nov 2025 to Sep 2027

01

Four thousand contracts, five value lines

Each volume range regressed into one value line against the adder

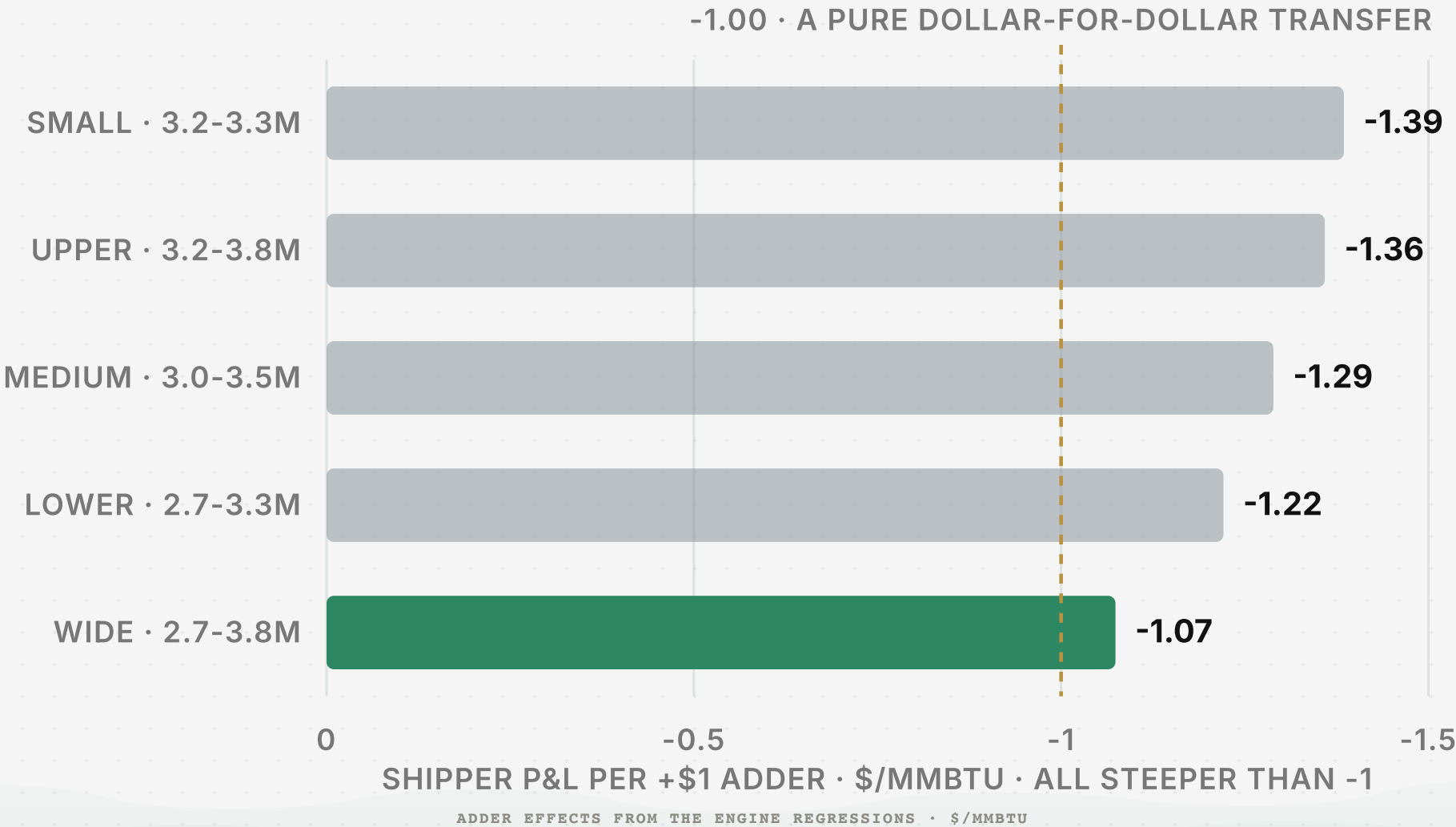


TRENDLINES EXACT FROM THE ENGINE REGRESSIONS · MARKET-EXPECTATION LINE ILLUSTRATIVE

Greater volume flexibility is usually more valuable; the wide 2.7 to 3.8M MMBtu range sits consistently on top.

A dollar of adder costs more than a dollar

— Shipper P&L response per +\$1 of adder, by volume range



The extra expense occasionally forces cancellations at the \$1M fee plus missed revenue on the shorts; the tighter the range, the steeper the penalty.

THE VERDICT

**Whoever models the fleet knows the true value of the contract:
and captures the share the market price leaves on the table.**

The market line is where negotiations start; the fleet model is where they are won. The same technique prices any contract element: cancellation flex, delivery windows, nomination conditions.

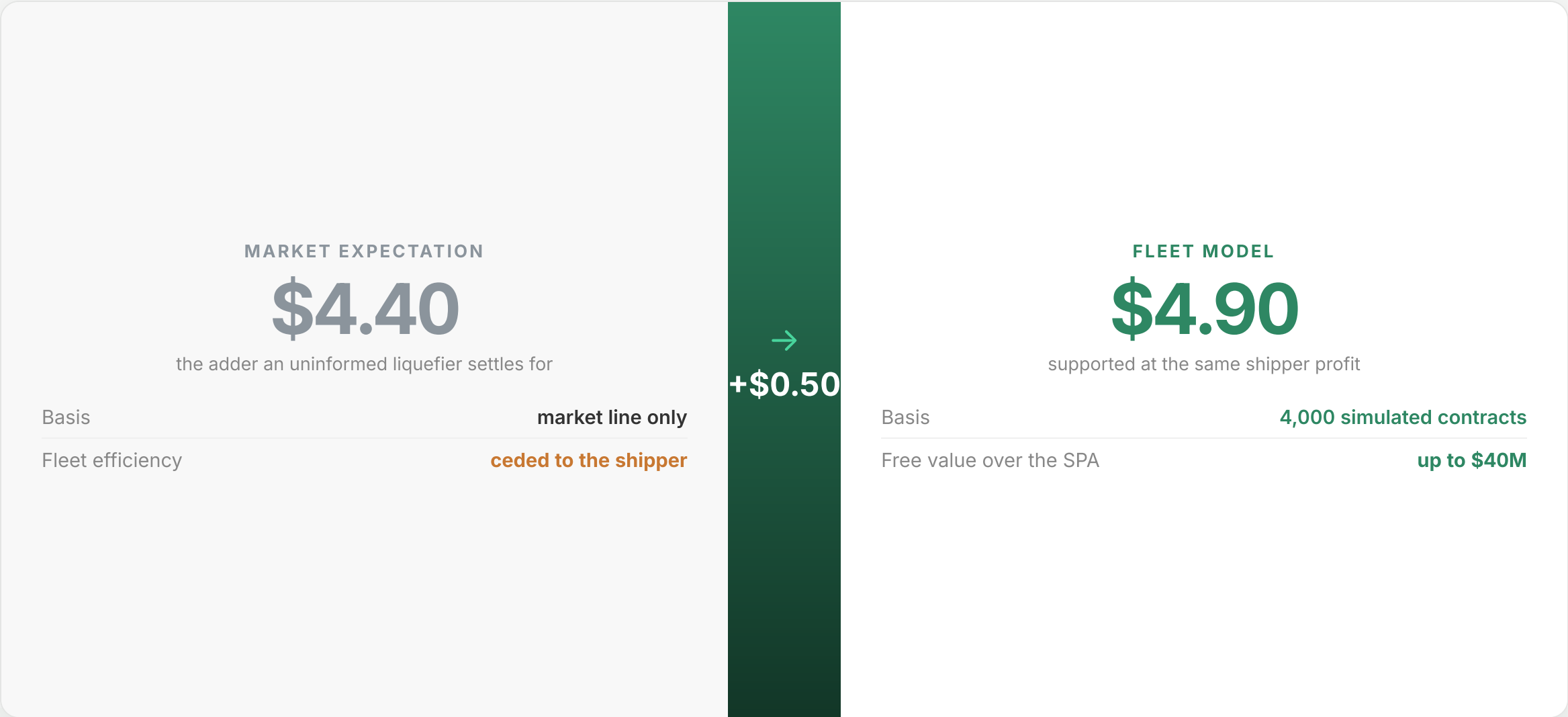
The payoff

The negotiation, worked through at \$7.50/MMBtu shipper profit

02

The negotiation, worked through

— Wide volume range proposed · market conditions put shipper profit at \$7.50/MMBtu



A \$1/MMBtu edge at a typical 1 mtpa SPA is roughly \$45M of extra annual profit, for whoever quantifies it first.

Takeaways

— What the 4,000 contracts teach



Wide volume ranges carry real value

The 2.7 to 3.8M MMBtu range is consistently the most valuable to ship and has the flattest adder effect at -1.07.



The information edge lives in the adder

Market \$4.40 against fleet-supported \$4.90: \$0.50/MMBtu, up to \$40M over the SPA, claimed by whoever quantifies it first.



Every adder dollar costs the shipper more than a dollar

Adder effects run -1.07 to -1.39: cancellations at the \$1M fee ripple into missed short revenue. Both parties are simulated on public terminal data.

Modelled with X-LNG

— Whole-portfolio optimisation for LNG books

1

Your world goes in

Contracts, vessels, charter rates, prices, spot assumptions and constraints, the full book, not a slice.

2

One optimal plan comes out

Feasible, P&L-maximising and constraint-compliant, re-solved for every scenario in minutes.

3

Every number checks out

Each result can be recalculated by hand, transparency your risk committee can audit.

Bring the fleet model to your next negotiation

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