

The position report, interrogated

Chapters 1 and 3. The report will be correct. Ask what was averaged to produce each line, and over which hours, before asking anything else.

Company / desk		Prepared by	
Book date		Reviewed by	

Line on the report	Figure	What was added across hours to produce it	Which hours does it belong to?	Reconciled to?
Sold forward against the generation				
Bought forward against the customers				
Net position				
Gross				
Hedge ratio				
Mark-to-market				

Item	Answer	Evidence / note
The four questions a desk is paid to answer		
What do we own, and WHEN does it deliver? (not how much)		
What does it cost to change? (spread, size, market impact: state it, or say it is assumed away)		
What happens to the CASH if the price moves? (not the valuation)		
Which of those numbers binds, and who owns the ranking?		
The four refusals		
No margin booked on a shaped volume against a flat hedge until the shape is priced		
No hedge ratio that has not been reconciled to physical production		
No plant valuation without its hours, the hour set its price was averaged over, and its starts		
No position whose day-one cash at a named move has not been computed		

Lindmoor: 4,960,000 sold, 4,200,000 bought, net short 760,000, 91.7031 per cent hedged. Every figure correct; the company is short 2,542,000 and 72.2489 per cent hedged.

The curve on one page

Chapter 2. The year's hours sorted and grouped. Read the rows as counts, not dates. The forward is set equal to the time-weighted average, so nothing below is a view on the level.

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Hours	Price per MWh	Hours x price	Share of the year's value	Cumulative hours	Above the average?	Available after the outage

Reading	Value	Lindmoor
Time-weighted average (sum of hours x price / hours)		
Hours above the average, share of the year		
Highest price / lowest price		
Average with the top band removed; movement		
Top band: share of value against share of hours		
Average over the available hours only		

Item	Answer	Evidence / note
The level-or-shape test, before any argument about "the price"		
What would each side's position be if both accepted the same average price?		
Disagreement disappears: it was about the level, and it is small		
Disagreement survives: it is about the shape, and the numbers on the table are the wrong numbers		
What this curve cannot price		
Anything path-dependent: storage cycles, ramping, minimum run and down times, starts		
The option to change your mind mid-year; any statement about a price path		

Lindmoor: 614,840.00 / 8,760 = 70.1872; 3,900 hours (44.5205 per cent) above it; 73.6250 over the 8,000 available hours.

Marginal cost, and the spark spread quoted at you

Chapter 4. Three numbers decide whether the plant runs, and none of them is the power price. Then three questions separate a valuation from a slogan.

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Build-up, per MWh	Input	Result	Transacted or assumed?
Fuel: heat rate x gas price			
Variable operating cost			
Marginal cost = dispatch threshold			
Forward power price (which hours is it the average of?)			
Forward spark spread			

Threshold	Formula	Value	Lindmoor
Gas price that erases the forward spark	(forward - variable cost) / heat rate		9.2760, 0.6760 above the hedge
Extra cost that stops the marginal running row	(lowest running price - marginal cost) / heat rate		0.9278 per MMBtu; that row is worth 7,869,040
Improvement that brings the next idle row in	marginal cost - highest idle price		2.32 per MWh

Item	Answer	Evidence / note
Three questions for every spark spread quoted		
What fuel price is inside it, and is it transacted or assumed?		
What heat rate, at what load, and how far does the answer move across the efficiency curve?		
Over how many hours is the spread meant to apply: every hour, the available hours, or only those that clear the cost?		
The gas leg		
Gas hedged on what volume? Gas burned at the dispatch? The difference is a position: size it, and give it a cash column		

A spark spread quoted as one number is quoted at the wrong resolution: in the hours the plant runs, the margin is 39.9984x to 1.3725x the forward spark, and in 4,100 hours it is nothing.

Dispatch and concentration

Chapter 5. One comparison per row. Then accumulate from the top: which hours carry the year, and what one hour of availability is worth where it falls.

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Book date		Reviewed by	

Hours	Price	Available	Runs ?	Margin per MWh	Margin per MW	Cumulative margin	Share of year	Share of available hours

Availability report, with an hours basis	Value
Available hours / hours in the year	
Running hours / available hours (a different ratio: say which)	
Output, MWh	
Top band per hour / marginal band per hour	
One per cent more available hours: at the bottom of the curve / in the top band (ceiling)	
Unplanned outage this period: which hours did it remove, ranked by price? Cost at those hours against cost at the annual average	

Item	Answer	Evidence / note
What the concentration licenses, and what it does not		
Cost every outage at the hours it removed, not at an annual average		
Judge the plant on hours captured, not on capacity factor		
Are the top hours visible a day ahead, an hour ahead, or only in hindsight? Say which; do not assume foresight		

Lindmoor: 3,900 of 8,000 hours; 42.7202 per cent of the margin in 350 hours; the top hour earns 29.1437x the marginal one.

The plant valuation, four ways

Chapter 6. Two questions, not one: how many hours does the plant run, and which hours was the block priced against. Every valuation summary answers all three demands below in writing.

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Treatment	Block priced at	Hours the price averages	Gross margin	Starts	Net of starts and fixed cost
(c) Must-run block, annual forward					
(c') Must-run block, its own hours					
(a) Hedged and dispatched, annual forward					
(a') Hedged and dispatched, its own hours					
(b) Unhedged, dispatched hour by hour					

Split of the naive gap, (b) less (c)	Amount	Share
Wrong hour set in the price: (c') less (c)		
Convexity, the right to refuse: (b) less (c')		
Naive gap		

Item	Answer	Evidence / note
Demand in writing, on the summary page		
Running hours, as a COUNT (not a percentage of an unstated base)		
The price the block was struck at, as a NUMBER (not "the forward")		
The hour set that price is the average of: 8,760 or the available hours		
The starts assumed, and how many more starts would close the gap to the flat block		
Before quoting a convexity		
It is a floor for the dispatch right against one written year, not an option value with time to run		
It moves only when hours cross the marginal cost; say which rows are within reach		

Lindmoor: 24,141,384.47 / 41,192,800.00 / 43,740,824.47 / 60,792,240.00. The naive gap of 36,650,855.53 is 17,051,415.53 of mispricing and 19,599,440.00 of convexity.

The outage plan, read as a valuation

Chapter 7. The meeting that fixes the outage decides more than any hedging decision. Put the curve in the room: one column per candidate window.

Company / desk		Prepared by	
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Per window	Window 1	Window 2	Window 3	Bottom (bound)	Top (bound)
Dates					
Hours falling in each price band (the curve has no calendar: state the split)					
Margin lost, per MW					
Margin lost, total					
Rank					
The block's own hours average					
True short beside the reported net					
Probability of a forced outage in the top hours that reverses the choice					

Item	Answer	Evidence / note
Which constraint actually binds?		
Calendar: the interval is consumed by running hours and starts, not by time		
Condition: a finding with a window that is not negotiable		
Resources: crews, heavy lift, rotatables, supervision, booked across a fleet		
Deferral risk: more exposure in exactly the hours where failure costs most (probability from engineering, not from the desk)		
Chronology: a real outage is consecutive days; the curve's bounds are not achievable exactly		
Minuted with the schedule		
The alternatives rejected and what each was worth		
Which constraints bound and which were assumed		
Who signed the valuation of the chosen dates		

Lindmor: 0 at the bottom, 36,057,216.00 at the top: 59.3122 per cent of the year and 1.8397x the convexity. Case two of this set prices three windows in between.

The retail hedge proposal

Chapters 8 and 9. A fixed price with an unfixed volume is not a fixed-price contract. Price the shape before quoting the price.

Company / desk		Prepared by	
Book date		Reviewed by	

The booked margin	Amount	Per MWh
Revenue: volume x fixed price		
Flat block bought at the forward		
Cost to serve		
Margin as the desk books it		
Cost of the same volume, hour by hour (load x price)		
Shape cost		
Margin once the hours are put back		

Hours	Price	Shape multiplier	Normalised load, MW	Volume, MWh	Cost at spot	Flat block, MWh	Block less load

Item	Answer	Evidence / note
Ask before the price is discussed		
The hedge priced against what: the forward or the load-weighted price? Both, side by side		
Which hours does the bought volume arrive in, and which hours does the sold volume leave in? As profiles, not totals		
What premium was charged for the customers' volume option? Which component of the cost to serve covers it?		
The normalisation: raw multipliers average what? Is the level set by the contract and the shape left alone?		
Amplitude: at what multiple of this shape does the shape take the whole margin (solve it; do not divide)?		

Lindmoor: 70.1872 against 75.4925; the shape takes 86.0857 per cent of the booked 25,883,698.63. Whole margin gone at 1.1627x this shape's amplitude.

The true short, reconciled

Chapter 10. Two documents, never subtracted: the trade file and the dispatch schedule. One subtraction, on a named page, signed by a named person.

Company / desk		Prepared by	
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	MWh	Source system	Owner
Retail load to serve			
Plant output at the expected dispatch			
Physically short			
Sold forward against the plant			
Bought forward against the retail book			
Short on paper (the reported net)			
True short: forward sale less output			
Buy-back volume in the plant valuation (must agree)			

Beside the net position	Value
Running hours the hedge was sized on	
Running hours the plant expects	
Ratio of the two	
Hedge ratio on the trade file / on physical production	

The two legs of the forward sale	Amount	Per MWh
Buy-back leg: sold at the forward, bought back in the idle hours (gain)		
Delivered leg: sold at the forward, worth the prices of the running hours (given up)		
Net: the block mispriced on the wrong hour set		

Lindmoor: 2,542,000 against 760,000 (3.3447x); the buy-back gains 31,971,899.54 and the delivered leg gives up 49,023,315.07: never report the first without the second.

Two legs, two clocks

Chapters 11 to 13. For any two positions described as offsetting, put the documentation of each side by side. Where the columns differ, the positions offset in value and not in cash.

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	Leg 1	Leg 2
Instrument and volume		
Cleared or bilateral; counterparty		
Threshold (a haircut on size)		
Collateral lag (a delay in time)		
Who pays whom, on what trigger		
Cash response to the declared move: amount		
Cash response: date		

At the declared move	As documented	Both legs cleared and netted
Cash out on the first morning		
Collateral received that morning		
Cash and undrawn facility		
Day-one position		
Initial margin: basis (net or gross) and amount, from the clearer		

Item	Answer	Evidence / note
Who owns the combination?		
Named person accountable for the day-one cash of the documentation portfolio as a whole		
Told when a new counterparty arrangement changes it		
Can produce the two-column table above on request		

Lindmoor at 40.00: 198,400,000.00 against 30,400,000.00, a factor of 6.5263x. On the first morning the threshold does not matter; the lag alone binds.

Liquidity as a position limit

Chapter 14. One division: liquidity over a declared move gives the cleared notional the company can carry. The move is the board's, written down as a choice.

Company / desk		Prepared by	
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Limit sheet line	Liquidity	Declared move	Cleared notional permitted	Cleared notional held	Over / under
Today					
At half the move					
At one and a half times the move					

Relief	What it closes	What it costs (state the basis)	Survives a restated move?
1. Carry less cleared position			
2. Arrange more committed liquidity			
3. Move the legs onto one clock			
4. Do nothing, as a decision			

Board minute: the declared move, why it was chosen, the relief chosen and what it bought (liquidity, not value), and the name of the person who owns the line.

Lindmoor at 40.00: $158,000,000 / 40.00 = 3,950,000$ MWh permitted against 4,960,000 held; over by 1,010,000, which is the 40,400,000 shortfall. Case three of this set prices the reliefs.

The group on four cells

Chapters 15 and 16. Compute each half on the hours, separately, and print all four cells before anything is added. Price the flat cells on the hours they cover.

Company / desk		Prepared by	
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	Flat reading	Hour by hour	Effect of the hours
Generation			
Supply			
Total			

Reading	Value
Do the two corrections carry the same sign? (then the flat total is biased, and you know which way)	
Convexity covers what share of the shape cost?	
Coverage claim: in the hours the plant runs, which rows are short and which long?	

Item	Answer	Evidence / note
Four questions of any aggregate		
What was averaged, and over WHICH set of things?		
Is the thing averaged linear in what moves it (a decision, a threshold, a floor, a product of two things that move together)?		
Whose quantity is it, and has it been reconciled to something physical?		
On whose clock does it settle?		
Then classify before recomputing		
Modelling error (first two): arrives as a variance at year end; fix by resolution		
Control failure (last two): arrives as an event on a date; close it this week whatever its size		

Lindmoor: 67,076,498.63 flat against 64,393,771.82 hour by hour; the convexity covers 87.9602 per cent of the shape cost, at this outage placement only.

The report that would survive

Chapter 17. Every line states what it was computed on and what it is judged against. Four columns, not a template of rows.

Company / desk		Prepared by	
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Line	Basis it must carry	Judged against	Cadence	Today
Net position in MWh				
True short position				
Hedge ratio (on physical production)				
Plant value (a spread, with treatments)				
Retail margin				
Day-one cash call				
Move that exhausts liquidity				

Item	Answer	Evidence / note
Remove		
Any MWh figure without an hours basis		
Any mark-to-market without a cash column beside it		
Any hedge ratio not reconciled to physical production		
Any page produced because it was produced last month		
The commentary rule		
Every sentence about a position names the quantity, the hours behind it and the cash it implies		
Two things stay off the page: a probability for the declared move, a single figure for the plant		

Rewrite the most-quoted line under the rule (quantity, hours, cash):

The one page, and Monday

Chapter 18 and the Conclusion. Three questions in binding order: what we own and when, what it is worth with the hours put back, what we must pay before any of it arrives.

Company / desk		Prepared by	
Book date		Reviewed by	

Line	Figure	Read against
Net position, as reported		
True short position		
Plant: must-run at the annual forward / on its own hours		
Plant: hedged and dispatched / hour by hour		
Convexity, and the gap it is taken from		
Margin concentration		
Outage exposure		
Retail margin, on the hours		
The group, flat against hourly		
Day-one cash call, as documented / both legs cleared		
Move that exhausts liquidity		

Item	Answer	Evidence / note
Monday: four things, no budget, no system change		
One subtraction: hedge volume less expected production; name the page and the signatory		
One multiplication: your load file on your price series, costed twice (hour by hour and at its average)		
One question of every block price: which hours is this the average of, and are they the hours the block covers?		
One conversation: settlement terms of the two largest offsetting positions on one sheet, and the first-morning cash at a named move		

Keep the hour, and the rest of the report can be rebuilt from it.