

# Matching physical and financial exposures – the ‘perfect’ hedge

## Example:

- It is planned to buy 1 MW baseload at 30 EUR/MWh for the month November
- 1 month future contract at 30 EUR/MWh is purchased
- With the beginning of the DA auctions for this month, price-independent bids for 1 MW/h can be submitted to EPEX SPOT
- The average DA spot price at EPEX in that month results to 31 EUR/MWh
- This would equal a loss of 1 EUR/MWh without the future contract
- However, that loss is offset due to the variation margin payments from the corresponding position in the month futures contract, which will be finally settled at average DA spot price at EPEX in that month at 31 EUR/MWh

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	Oct 29th	Oct 30th	Oct 31th	Nov 1st	Nov 2nd <sup>h</sup>	Nov 3rd	...	Nov 28 <sup>th</sup>	Nov 29 <sup>th</sup>	Nov 30 <sup>th</sup>	Result unhedged vs planned	Result hedged with EEX Week Future
	Thu	Fri	Mon	Tue	Wed	Thu	...	Mon	Tue	Wed		
Purchase price spot (DA) (EUR/MWh)			32	29	32	33	...	29	28	<b>Avg. 31</b>		
Difference to plan (30 EUR)			-2	+1	-2	-3	...	+1	+2			
Number of MWh			24	24	24	24	...	24	24			
<b>Total difference to plan</b>			<b>-48</b>	<b>+24</b>	<b>-48</b>	<b>-72</b>	...	<b>+24</b>	<b>+48</b>		<b>-720</b>	<b>-720</b>
Trade price Future (EUR/MWh)	30											
Settlement price Future (EUR/MWh)	30.5	29.5	30.5	29	30	30.5	...	30.5				
Final settlement price Future (EUR/MWh)									31			
Change (EUR)	+0.5	-1	+1	-1.5	+1	+0.5	...	-1	+0.5			
Contract volume (MWh)	720	720	720	720	720	720	...	720	720			
Position (MW)	1	1	1	1	1	1	...	1	1			
<b>Variation margin (EUR)</b>	<b>+360</b>	<b>-720</b>	<b>+720</b>	<b>-1080</b>	<b>+720</b>	<b>+360</b>	...	<b>-720</b>	<b>+360</b>			<b>720</b>
Total difference											<b>-720</b>	<b>0</b>