Matching physical and financial exposures – the ‘perfect’ hedge

Example:

- It is planned to buy 1 MW baseload at 30 GBP/MWh for the week 23-29 March
- 1 week future contract at 30 GBP/MWh is purchased
- With the beginning of the DA auctions for this week, price-independent bids for 1 MW/h are automatically submitted to EPEX SPOT (requires a pre-setup with EEX)
- The average DA spot price at EPEX in that week results at 31 GBP/MWh
- This would equal a loss of 1 GBP/MWh without the future contract
- However, that loss is offset due to the variation margin payments from the corresponding position in the week future contract, which will be finally settled at the average DA spot price at EPEX in that week at 31 GBP/MWh.

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	Sep 19th	Sep 20th	Sep 23rd	Sep 24th	Sep 25th	Sep 26th	Sep 27th	Sep 28th	Sep 29th	Sep 30th	**Result unhedged vs planned**	**Result hedged with EEX Week Future**
	Thu	Fri	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon		
Purchase price spot (DA) (GBP/MWh)			*32*	*29*	*32*	*33*	*34*	*29*	*28*	***Avg. 31***		
Difference to plan (30GBP)			-2	+1	-2	-3	-4	+1	+2			
Number of MWh			24	24	24	24	24	24	24			
Total difference to plan			**-48**	**+24**	**-48**	**-72**	**-96**	**+24**	**+48**		**-168**	**-168**
Trade price Future (GBP/MWh)	**30**											
Settlement price Future (GBP/MWh)	30.5	29.5	30.5	29	30	30.5	31.5					
Final settlement price Future (GBP/MWh)										***31***		
Change (GBP)	+0.5	-1	+1	-1.5	+1	+0.5	+1			-0.5		
Contract volume (MWh)	168	168	168	168	168	168	168	168	168	168		
Position (MW)	1	1	1	1	1	1	1	1	1	1		
Variation margin (GBP)	**+84**	**-168**	**+168**	**-252**	**+168**	**+84**	**+168**			**-84**		**168**
Total difference											**-168**	**0**