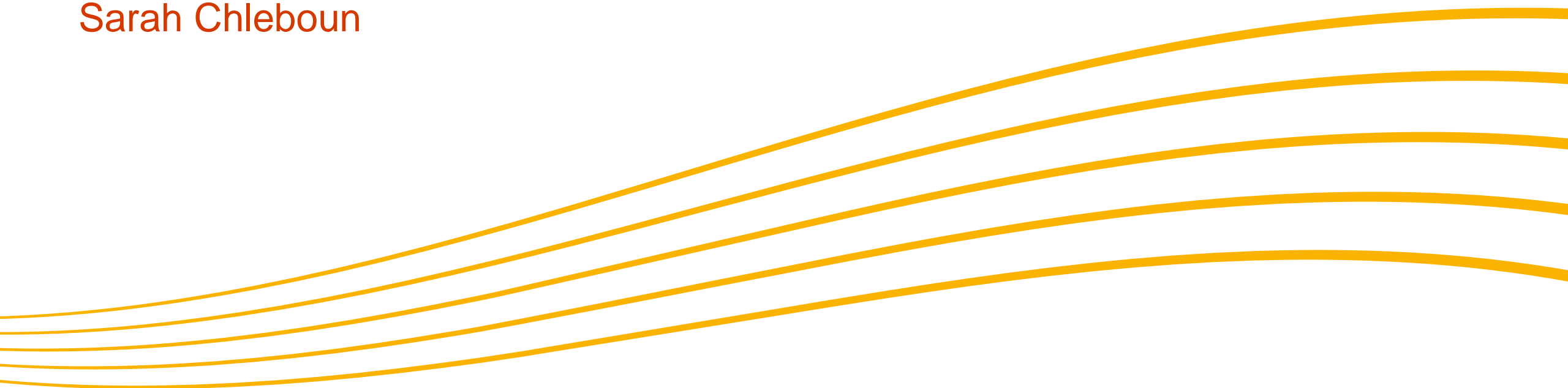


AI Cost Gap Recovery – Worked Example

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AI Cost Gap Recovery – Worked Example

Identifying the AI Cost Gap Period

- In this example there are 2 generators involved in a project and one connects after the OFTO asset transfer, meaning there was Anticipatory Investment for the 2nd generator.
- The total capital costs are £500m
- Ofgem tells us the value that forms the AI share of the capital costs is £200m, i.e. 40% of the capital costs.
- This means that 40% of any OFTO revenue to be collected is AI.

OFTO asset transfer (Generator 1 already connected)				Generator 2 Connects		
Y1	Y2	Y3	Y4		Y5	...
250	365	365	300	65	365	...
AI Cost Gap Period				Remaining AI paid via offshore local tariffs using existing calculations		

$$\text{AI Cost Gap Period} = 250 + 365 + 365 + 300 = 1280 \text{ days}$$

AI Cost Gap Recovery

Identifying the value of the AI Cost Gap

- AI Cost Gap = 40% OFTO Revenue for the relevant period
- Assumption: Inflation for each year is 3%

Year	Year 1	Year 2	Year 3	Year 4
Total OFTO Revenue for Year i	£10m	£15m	£15m	£15m
AI Cost Gap (in Year i price base)	£4m	£6m	£6m	£5m
AI Cost Gap (in Year 4 price base – to 3dp)	£4m x 1.03 ³	£6m x 1.03 ²	£6m x 1.03 ¹	£5m
	£4.371m	6.365m	6.180m	£5m

- At the time of tariff calculation the value of the AI cost gap is:

$$\text{AI Cost Gap} = £4.371\text{m} + £6.365\text{m} + £6.180\text{m} + £5\text{m} = £21.916\text{m (to 3dp)}$$

Calculating the AI Cost Gap Tariff

Calculating the AI Cost Gap Tariff – The Theory

- The AI Cost Gap Tariff (expressed in £/kW) shall be the ratio of the AI Cost Gap that the subsequent generator/s is liable to pay in the relevant year (£) and the Transmission Entry Capacity (TEC) in kW of the subsequent generator/s:

$$AI\ Cost\ Gap\ Tariff\ for\ Generator\ i = \frac{n \times AI\ Cost\ Gap}{N \times TEC_i}$$

- Where:
 - TEC_i = Transmission Entry Capacity of generator i in kW
 - n = number of days remaining in the year over which the tariff is to be paid
 - N = total number of days over which the tariff is applicable
- This calculation shall be used for the initial partial year in which the subsequent generator connects (if applicable) and the first full charging year. For each subsequent year that the tariff is applicable for after the year of calculation, the AI Cost Gap Tariff shall be inflated in the same manner as the associated Offshore Transmission Owner Revenue.

Calculating the AI Cost Gap Tariff

For this example:

- AI Cost Gap Period = 1280 days
- Length of initial part year of payment = 65 days
- Total Length of period to pay over = 1525 days (this is 65 days + 4 whole years)
- Generator 2's TEC = 400MW

$$\text{Initial part year AI Cost Gap Tariff for G2} = \frac{65 \times 21,916,308}{1525 \times 400 \times 1000} = \text{£2.34/kW}$$

$$\text{Full year AI Cost Gap Tariff for G2} = \frac{365 \times 21,916,308}{1525 \times 400 \times 1000} = \text{£13.11/kW}$$

- For each year that the tariff is applicable, the full year AI Cost Gap Tariff shall be inflated in the same manner as the associated OFTO's Revenue - or we could recalculate each year if the generators TEC changes during this period.

Year	Year 4	Year 5	Year 6	Year 7	Year 8
AI Cost Gap Tariff (in Year 4 price base, £/kW)	2.34	13.11	13.11	13.11	13.11
AI Cost Gap Tariff (in Year i price base, £/kW to 3dp) – Assuming inflation = 3%	2.34 x 1	13.11 x 1.03	13.11 x 1.03 ²	13.11 x 1.03 ³	13.11 x 1.03 ⁴
	£2.34/kW	£13.51/kW	£13.91/kW	£14.33/kW	£14.76/kW

- Generator 2 will also have offshore local tariffs set at the point of connection to cover the remaining AI quantity for each year – these shall be calculated as the usual offshore local tariffs, using generator 2's share of the OFTO revenue in the calculation.