



FCC Methodology Review for 2025 Focus on Power Generation

November.2024



Overview

The FCC Methodology provides the process to determine the Forecasted Contracted Capacity for Entry and Exit to inform the capacity prices each year

The Methodology as it stands provides some flexibility in terms of what updates to data can be made

In all circumstances we look to inform Stakeholders of the approach. For a change to the FCC Methodology itself there is a process to follow to informally and formally receive views.

National Gas is proposing to review one part of the methodology, that of the Capacity Utilisation Factor (Currently a sector specific factor is applied in the methodology if the calculated for a specific point from the previous year is above a value of “2.00”).

Reviewing recent utilisation for Power Stations in particular, we believe, shows a case that this threshold could benefit from being updated, likely for Power Stations only.

This presentation provides some analysis and potential updates for 2025 for discussion

The Issue

Currently, with the volumes as they have been in recent years, for the Power Generation Exit points, we believe the Exit FCC is lower than it should likely be. This has the effect of having a denominator that is lower than actuals.

The overall effect of this is that, with a lower FCC, the prices are higher than they would otherwise be, increasing the chance (all else being equal) of over recovery on Exit Capacity charges.

It is worth noting that any over recovery, where this happens, is ultimately passed back to charges over time. This focus is on improving the forecasting arrangements to be as reflective as they can be including taking on changing patterns into the methodology where it is helpful to do so.

UNC Obligations

- NGT is required to maintain and keep under review the FCC Methodology and consult with Users on any material change (and the effect of such change) to it.
- NGT must notify Users of any proposed change to the FCC Methodology not less than 40 Business Days before the time required to notify Reserve Prices. (End of May).
- If a User gives notice to NGT that any proposed change should not be made within 20 Business Days of the notification, the implementation of the change shall be determined by Ofgem.
- NGT shall publish the FCC Methodology, and all changes made to it.



Analysis



Power Generation Capacity Forecasts

Power Generation Capacity actuals above FCC forecasts

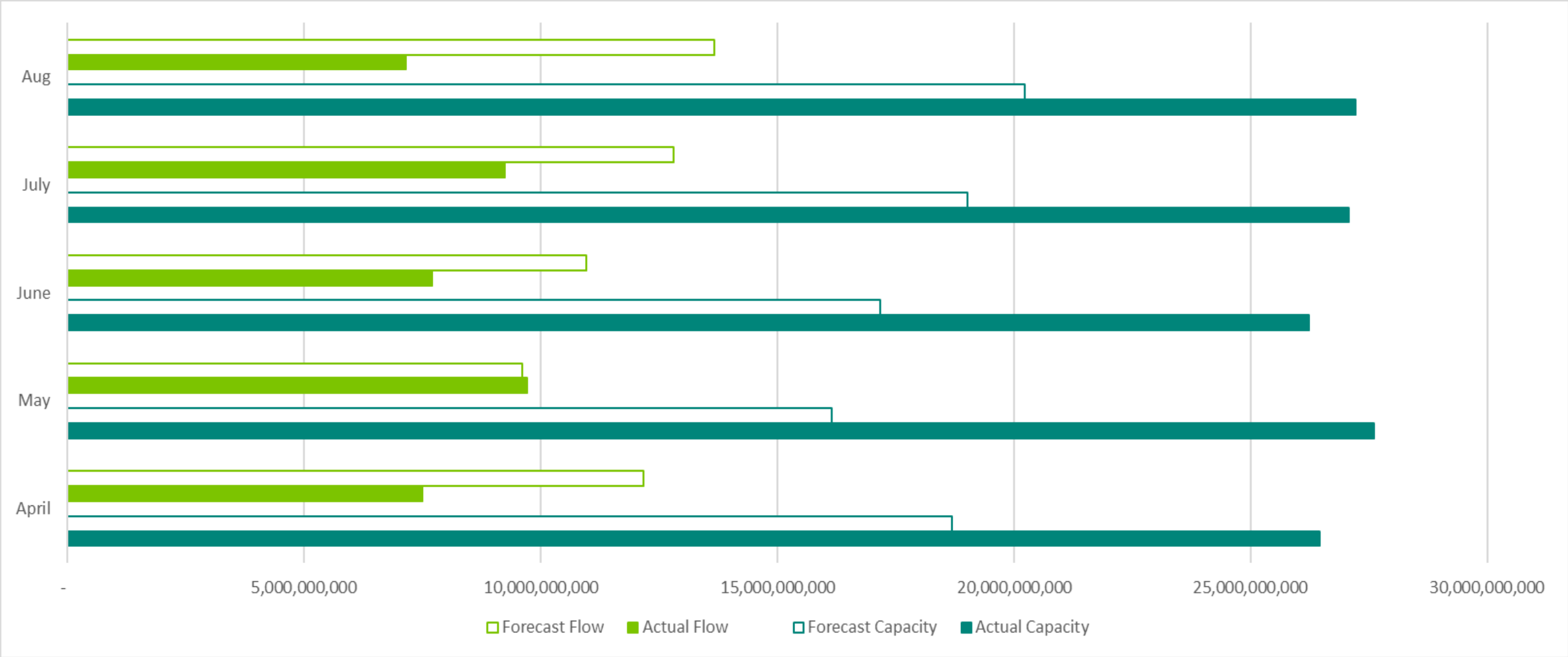
Change made to application of FCC for Oct 24 where any PG holding enduring capacity above forecast flows no longer overwritten (previously value not applied due to belief that these sites where no user commitment would reduce in the July window)

Despite this PG sites still booking capacity well above flow forecasts.

Significant element of this is down to annual capacity bookings (AFLEC) that occur in July, for the following October, but after the FCC is set.

AFLEC for the Gas Year is not known at time of FCC calculation, and historic AFLEC bookings above flows are not fully accounted for in FCC calculation due to capping the Capacity Utilisation Factor at the sector average at 2x flows.

Exit Capacity: Power Generation



Power Generation Capacity Forecasts Methodology

(c) Using previous year actual utilisation, calculate a utilisation factor to be applied to

20(b) (flow forecasts based on demand):

- i. Calculate the previous year actual utilisation per month based on flows and bookings.
- ii. Apply the utilisation figure¹³ to the Gas Year it relates to the values calculated in 20(b)

¹³ If the utilisation value is over 2.00 or there is no flow at a site then use the sector average, examples of the sectors are Storage, Power Station, Industrial, GDN's

Exit Capacity: Power Generation – Oct 23

kWh/d	AFLEC 21	AFLEC 22	AFLEC 23
1	-	72,600,000	72,600,000
2	-	20,614,000	20,614,000
3	-	69,000,000	59,300,000
4	-	20,666,667	20,666,667
5	-	62,880,000	62,880,000
6	-	20,000,000	16,700,000
7	-	35,750,000	35,750,000
8	-	17,980,000	15,400,000
9	-	35,200,000	29,500,000
10	-	34,650,000	34,650,000
11	-	103,200,000	81,800,000
12	-	11,601,000	11,601,000
13	-	49,000,000	49,000,000
14	-	50,000,000	40,000,000
15	-	82,000,000	65,400,000
16	-	55,400,000	55,400,000
17	-	-	15,000,000
TOTAL	-	740,541,667	686,261,667

FCC

Exit Capacity Utilisation Cap (2x) applied to 15 PG sites.

9 as a direct result of AFLEC
6 other.

Exit Capacity: Power Generation – Oct 23

kWh/d	AFLEC 23	FCC (based on Flow) Oct 23	Greater of	Variance
1	72,600,000	19,090,701	72,600,000	53,509,299
2	20,614,000	14,735,025	20,614,000	5,878,975
3	59,300,000	35,299,406	59,300,000	24,000,594
4	20,666,667	9,385,218	20,666,667	11,281,449
5	62,880,000	54,532,549	62,880,000	8,347,451
6	16,700,000	9,344,666	16,700,000	7,355,334
7	35,750,000	12,476,027	35,750,000	23,273,973
8	15,400,000	5,768,287	15,400,000	9,631,713
9	29,500,000	16,139,874	29,500,000	13,360,126
10	34,650,000	9,879,688	34,650,000	24,770,312
11	81,800,000	75,452,524	81,800,000	6,347,476
12	11,601,000	25,948,690	25,948,690	-
13	49,000,000	37,888,776	49,000,000	11,111,224
14	40,000,000	30,958,799	40,000,000	9,041,201
15	65,400,000	64,187,860	65,400,000	1,212,140
16	55,400,000	8,603,081	55,400,000	46,796,919
17	15,000,000	32,736,007	32,736,007	-
TOTAL	686,261,667	462,427,176	718,345,363	255,918,187

Oct 23 FCC

Annual Variance – 93,410,138,339

c £19m

Power Generation Capacity Forecasts Options

- 1) Do Nothing
- 2) Use Previous Years (Y-1) AFLEC
- 3) Remove Cap
- 4) Apply revised Cap

Exit Capacity: Power Generation – Oct 24

kWh/d	AFLEC 21	AFLEC 22	AFLEC 23	AFLEC 24
1	-	72,600,000	72,600,000	36,300,000
2	-	20,614,000	20,614,000	20,614,000
3	-	69,000,000	59,300,000	36,100,000
4	-	20,666,667	20,666,667	20,666,667
5	-	62,880,000	62,880,000	-
6	-	20,000,000	16,700,000	9,700,000
7	-	35,750,000	35,750,000	-
8	-	17,980,000	15,400,000	9,000,000
9	-	35,200,000	29,500,000	18,500,000
10	-	34,650,000	34,650,000	-
11	-	103,200,000	81,800,000	63,700,000
12	-	11,601,000	11,601,000	-
13	-	49,000,000	49,000,000	-
14	-	50,000,000	40,000,000	40,000,000
15	-	82,000,000	65,400,000	40,300,000
16	-	55,400,000	55,400,000	43,400,000
17	-	-	15,000,000	-
TOTAL	-	740,541,667	686,261,667	338,280,667

The variance in bookings between years discounts option of use of previous years values for FCC.

Exit Capacity: Power Generation – Oct 24

kWh/d	AFLEC 24	FCC (based on Flow) Oct 24	Greater of	Variance
1	36,300,000	16,583,264	36,300,000	19,716,736
2	20,614,000	14,643,187	20,614,000	5,970,813
3	36,100,000	39,762,985	39,762,985	0
4	20,666,667	11,020,007	20,666,667	9,646,660
5	-	34,135,304	34,135,304	0
6	9,700,000	10,702,507	10,702,507	0
7	-	11,761,587	11,761,587	0
8	9,000,000	7,926,818	9,000,000	1,073,182
9	18,500,000	16,316,449	18,500,000	2,183,551
10	-	10,623,834	10,623,834	0
11	63,700,000	92,056,489	92,056,489	0
12	-	43,799,041	43,799,041	0
13	-	49,190,609	49,190,609	0
14	40,000,000	30,958,799	40,000,000	9,041,201
15	40,300,000	64,996,472	64,996,472	0
16	43,400,000	7,526,756	43,400,000	35,873,244
17	-	25,372,929	25,372,929	0
TOTAL	338,280,667	487,377,037	570,882,424	83,505,387

Oct 24 FCC

Annual Variance – 30,479,466,297

c £6m

Despite reduced AFLEC bookings from Oct 24, the revenue impact of these unaccounted-for capacity bookings would deem it not appropriate to do nothing.

Exit Capacity: Power Generation – No Cap

kWh/d	FCC Cap Utilisation Capped Oct 24	Correction Factor - No Adjust	Capped At (2x)	AFLEC 24	FCC (based on flow) Oct 24	Greater of AFLEC or FCC Flow	FCC Cap Utilisation No Cap.	Increase
1	Yes	5.11	1.52	36,300,000	16,583,264	36,300,000	55,734,027	39,150,763
2	no	1.63		20,614,000	14,643,187	20,614,000	14,643,187	
3	Yes	2.36	1.52	36,100,000	39,762,985	39,762,985	61,567,075	21,804,090
4	no	1.57		20,666,667	11,020,007	20,666,667	11,020,007	
5	no	1.41		-	34,135,304	34,135,304	34,135,304	
6	Yes	2.61	1.52	9,700,000	10,702,507	10,702,507	18,372,887	7,670,380
7	Yes	3.79	1.52	-	11,761,587	11,761,587	29,321,828	17,560,241
8	Yes	2.64	1.52	9,000,000	7,926,818	9,000,000	13,739,203	5,812,386
9	Yes	2.26	1.52	18,500,000	16,316,449	18,500,000	24,194,366	7,877,917
10	Yes	3.71	1.52	-	10,623,834	10,623,834	25,872,038	15,248,204
11	no	1.64		63,700,000	92,056,489	92,056,489	92,056,489	
12	Yes	5.18	1.52	-	43,799,041	43,799,041	74,543,301	30,744,260
13	no	1.80		-	49,190,609	49,190,609	49,190,609	
14	no	1.94		40,000,000	30,958,799	40,000,000	30,958,799	
15	no	1.96		40,300,000	64,996,472	64,996,472	64,996,472	
16	Yes	12.30	1.52	43,400,000	7,526,756	43,400,000	60,860,580	53,333,824
17	no	1.05		-	25,372,929	25,372,929	25,372,929	
TOTAL				338,280,667	487,377,037	570,882,424	686,579,102	199,202,065
						+ 83,505,387		
							Inc. non AFLEC Cap'd	+ 213,533,913

A cap is necessary to prevent overstating bookings across the sector for future years.

Exit Capacity: Power Generation – Oct 24: Cap 4x

kWh/d	FCC Cap Utilisation Capped Oct 24	Correction Factor - No Adjust	Capped At (2x)	AFLEC 24	FCC (based on flow) Oct 24	Greater of AFLEC or FCC Flow	Capped At (4x)	FCC Cap Utilisation set 4x	Increase
1	Yes	5.11	1.52	36,300,000	16,583,264	36,300,000	1.66	18,137,404	1,554,140
2	no	1.63		20,614,000	14,643,187	20,614,000		14,643,187	
3	Yes	2.36	1.52	36,100,000	39,762,985	39,762,985		61,567,075	21,804,090
4	no	1.57		20,666,667	11,020,007	20,666,667		11,020,007	
5	no	1.41		-	34,135,304	34,135,304		34,135,304	
6	Yes	2.61	1.52	9,700,000	10,702,507	10,702,507		18,372,887	7,670,380
7	Yes	3.79	1.52	-	11,761,587	11,761,587		29,321,828	17,560,241
8	Yes	2.64	1.52	9,000,000	7,926,818	9,000,000		13,739,203	5,812,386
9	Yes	2.26	1.52	18,500,000	16,316,449	18,500,000		24,194,366	7,877,917
10	Yes	3.71	1.52	-	10,623,834	10,623,834		25,872,038	15,248,204
11	no	1.64		63,700,000	92,056,489	92,056,489		92,056,489	
12	Yes	5.18	1.52	-	43,799,041	43,799,041	1.66	43,799,041	0
13	no	1.80		-	49,190,609	49,190,609		49,190,609	
14	no	1.94		40,000,000	30,958,799	40,000,000		30,958,799	
15	no	1.96		40,300,000	64,996,472	64,996,472		64,996,472	
16	Yes	12.30	1.52	43,400,000	7,526,756	43,400,000	1.66	8,644,514	705,388
17	no	1.05		-	25,372,929	25,372,929		25,372,929	
TOTAL				338,280,667	487,377,037	570,882,424		565,609,783	78,232,746
National Gas Transmission						+ 83,505,387		Inc. non AFLEC Cap'd	+ 86,315,223

Power Generation Capacity Forecasts Options: Reflections

1. Do Nothing:

The revenue impact of these unaccounted-for capacity bookings would deem it not appropriate to do nothing.

2. Use Previous Years (Y-1) AFLEC:

The variance in bookings between years discounts option of use of previous years values for FCC.

3. Remove Cap:

A cap is necessary to prevent over-stating bookings across the sector for future years.

4. Apply revised Cap:

We believe the application of a revised cap (4 - for Power Generation sites only) enables a number of these wider booking profiles resulting from Annual Capacity Bookings to be accounted for for these sites, resulting in an aggregated position across the sector closer reflecting actuals.



Proposal

Welcome Stakeholder views on this approach



Power Generation Capacity Forecasts Proposal

- (c) Using previous year actual utilisation, calculate a utilisation factor to be applied to 20(b) (flow forecasts based on demand):
- i. Calculate the previous year actual utilisation per month based on flows and bookings.
 - ii. Apply the utilisation figure¹³ to the Gas Year it relates to the values calculated in 20(b)

¹³ If the utilisation value is over 2.00, **or 4.00 in the case of Power Stations**, or there is no flow at a site then use the sector average, examples of the sectors are Storage, Power Station, Industrial, GDN's

N.B. This change still leaves the option for National Gas to override the methodology should this outcome have any anomalous outcomes or unintended consequences. This allows for the approach to be updated and put into practise to fully assess its impact going forward.

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Thank you

