

Gas
Transmission

NTSCMF

FCC Development - Summary

2 March 2021

nationalgrid



FCC Workshops:

- **04/02** – Initial discussions on range of topics, focus on flows and utilisations and some inputs to help shape FCC thinking
- **11/02** – Suggested key inputs for FCC, an approach for Exit including a summary values of the outputs this would have on FCC
- **18/02** – Initial Entry Approach shared at principle level, series of steps and summary data
- **25/02** – Updated Exit numbers from those shared on 11/02 and re-run through the entry steps including summary data applying this.
 - Material from 25/02 is presented here.
- All material will soon be available on the NG website here:
 - <https://www.nationalgrid.com/uk/gas-transmission/charging/gas-charging-discussion-gcd-papers>

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Forecasted Contracted Capacity Workshop

25 February 2021 (copy of material)

nationalgrid



Agenda

- **Timetable to follow – reminder of dates**
- **Reflections from discussion on 18th February**
- **For review**
 - **Updates to Exit**
 - **Entry overview & some initial numbers**

High level timeline between now and May 2021:

Publication of
October 2021 Entry
and Exit Reserve
Prices

FCC Updates

Weekly workshops, monthly NTSCMFs

FCC Methodology consultation

FCC Methodology update in place

Updated FCC Values for Charge Setting



Workshop	Agenda	Workshop	Agenda	Workshop	Agenda
11/02/2021	Exit draft (outline & summary)	11/03/2021	Updates / FCCM Drafting	08/04/2021	Reviewing FCC in line with FCCM
18/02/2021	Entry draft (outline)	18/03/2021	FCCM Final Text	15/04/2021	Reviewing FCC in line with FCCM
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National Period ahead of consultation on Methodology to be used to produce the FCC | Period of applying the methodology to determine FCC

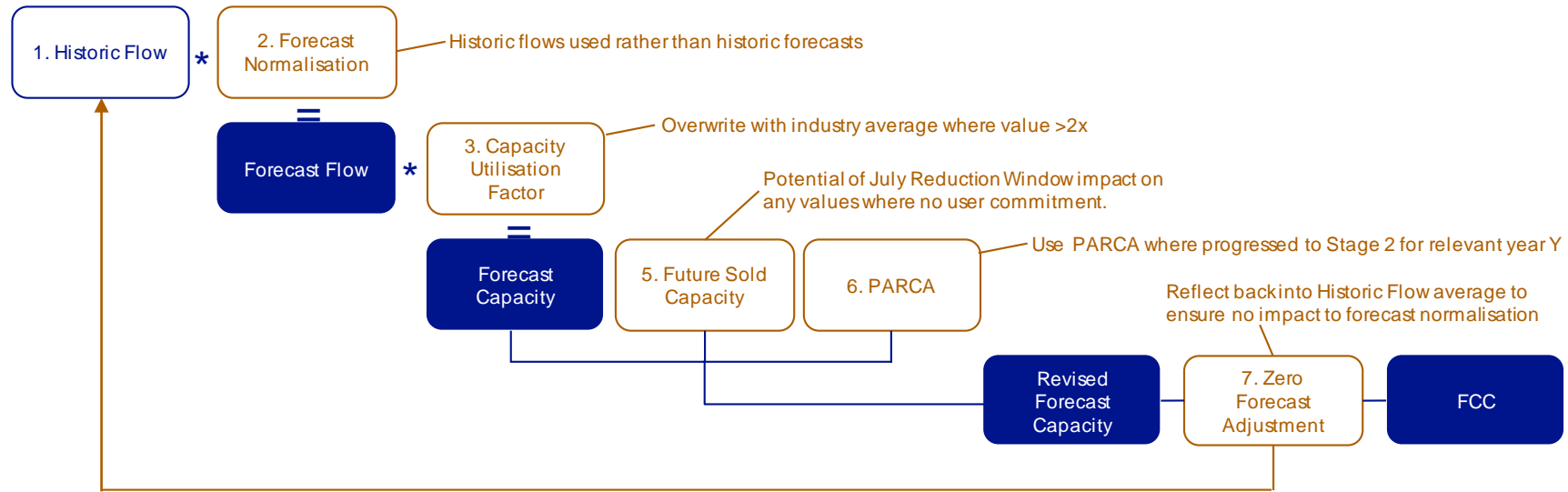
Discussions and reflections from previous session

High level overview of what was discussed on 18th February:

- Difficult to get an actual forecast and what we all want is an accurate forecast.
- Sensitivities on the FCC and what the impact would be if incorrect forecast is used. One we will look to provide some sensitivities at suitable point to make them relatable.
- PARCA's – look at whether should look at the value for all gas years even at Stage 2 as the date may change
- GDN – links to the Exit Capacity Planning Guidance which is going to be introduced as part of RIIO T2
- Entry specific: review of proposed methodology to follow to determine an initial set of numbers.
- Quarterly FCC values to create an annual value is a good idea for Entry, would this also be used to inform the phasing? Phasing may mean different things to people. It may be revenue assumed phasing from a revenue collection assumptions (to potentially inform RRC expectations). The use of the quarterly values in determining an annual FCC is another approach on phasing that is now part of the Entry FCC development.
- Overall seems in the right direction of travel noting refinements will be likely and balance on detail for the FCC Methodology
- Transparency – we will look at how we provide data externally shortly.

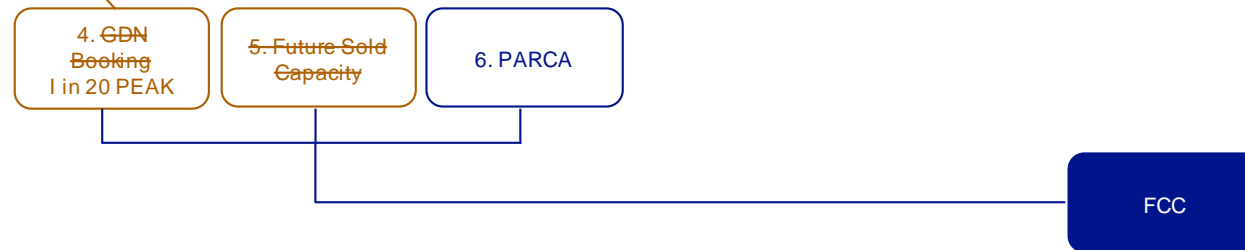
Draft Proposal – Exit FCC Methodology

DC – Power Stations, DC – Industrials, Interconnectors, Storage Sites



GDNs

Application of GDN 1 in 20 PEAK Undiversified value for GDN forecast.
Allocated by Exit Point via GDN Y Booking Profile,



Draft Proposal – Exit FCC Methodology

DC – Power Stations, DC – Industrials, Interconnectors, Storage Sites



Exit Point Type kWh/d	FCC Oct 2020	Draft* FCC Oct 2021	Variance from Oct 2020	%	Current Variance from Forecast FCC
DC - POWER STATION	1,194,587,120	910,409,057	-351,650,148	-28%	-26%
DC - INDUSTRIAL	212,555,576	110,998,133	-34,085,358	-23%	-22%
GDN	4,190,830,954	3,979,629,092	-211,201,862	-5%	-3%
INTERCONNECTOR	418,322,360	410,637,756	-7,684,604	-2%	-52%**
STORAGE SITE	478,702,679	230,257,653	-248,445,026	-52%	-49%
TOTAL	6,494,998,689	5,641,931,692	-853,066,997	-13%	-15%

* Proof of Concept / indicative data values only.

** Interconnection variance driven by winter / summer profile.

FCC

Draft Proposal – Exit FCC Methodology (from

DC - Power Stations, DC - Industrials, Interconnectors, Storage Sites

11.02.2021)

Exit Point Type kWh/d	FCC Oct 2020	Draft FCC Oct 2021	Variance from 2020 Oct	%	Current Variance from Forecast FCC
DC - POWERSTATION	1,194,587,120	1,002,122,031	-192,465,088	-16%	-26%
DC - INDUSTRIAL	212,555,576	165,033,904	-47,521,672	-22%	-22%
GDN	4,190,830,954	4,156,889,131	-33,941,823	-1%	-3%
INTERCONNECTOR	418,322,360	305,521,202	-112,801,158	-27%	-52%
STORAGE SITE	478,702,679	230,257,653	-248,445,026	-52%	-49%
TOTAL	6,494,998,689	5,859,823,921	-635,174,768	-10%	-15%

Draft Proposal – Exit FCC Methodology

DC – Power Stations, DC – Industrials, Interconnectors, Storage Sites

Exit Point Type kWh/d October 2021	1) Historic Flows	2) Normalisation Factor	3) Utilisation Factor	4) GDN Bookings 1 in 20 PEAK Und	5) Future Sold	6) PARCA	7) Zero Forecast Flow	Draft* FCC October 2021
DC - POWER STATION	628,706,892	459,007,352	533,674,604		565,606,179	125,708,061		910,409,057
DC - INDUSTRIAL	60,588,260	63,754,249	88,339,382		85,577,773	0		110,998,133
GDN				3,979,629,092	4,085,703,994	78,361,242		3,979,629,092
INTERCONNECTOR	256,706,727	363,282,544	410,637,756		15,012,000	0		410,637,756
STORAGE SITE	116,068,480	116,068,480	125,220,989		142,488,582	0		230,257,653

GDNs

TOTAL	1,062,070,359	1,002,112,624	1,157,872,731	3,979,629,092	4,894,388,528	204,069,303		5,641,931,692
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* Proof of Concept / indicative data values only.

Bookings

Capacity

FCC

Draft Proposal – Exit FCC Methodology (as of 11 02 21)

1. Historic Flow

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2. Forecast Normalisation

Exit Point Type kWh/d October 2021	1) Historic Flows	2) Normalisation Factor	3) Utilisation Factor	4) GDN Bookings	5) Future Sold	6) PARCA	MAX	7) Zero Forecast Flow	Draft FCC October 2021
DC - POWERSTATION	580,686,932	625,784,558	764,527,230		547,289,241	129,086,309	1,042,190,096	-40,068,065	1,002,122,031
DC - INDUSTRIAL	108,879,099	110,341,617	147,162,438		103,894,711	0	165,033,904	0	165,033,904
GDN				4,134,257,584	4,085,703,994	78,361,242	4,156,889,131	0	4,156,889,131
INTERCONNECTOR	256,706,727	270,288,150	305,521,202		15,012,000	0	305,521,202	0	305,521,202
STORAGE SITE	116,068,480	116,068,480	125,220,989		142,488,582	0	230,257,653	0	230,257,653
GDNs									
TOTAL	1,062,341,238	1,122,482,804	1,342,431,859	4,134,257,584	4,894,388,528	207,447,551	5,899,891,986	-40,068,065	5,859,823,921

4. GDN Bookings

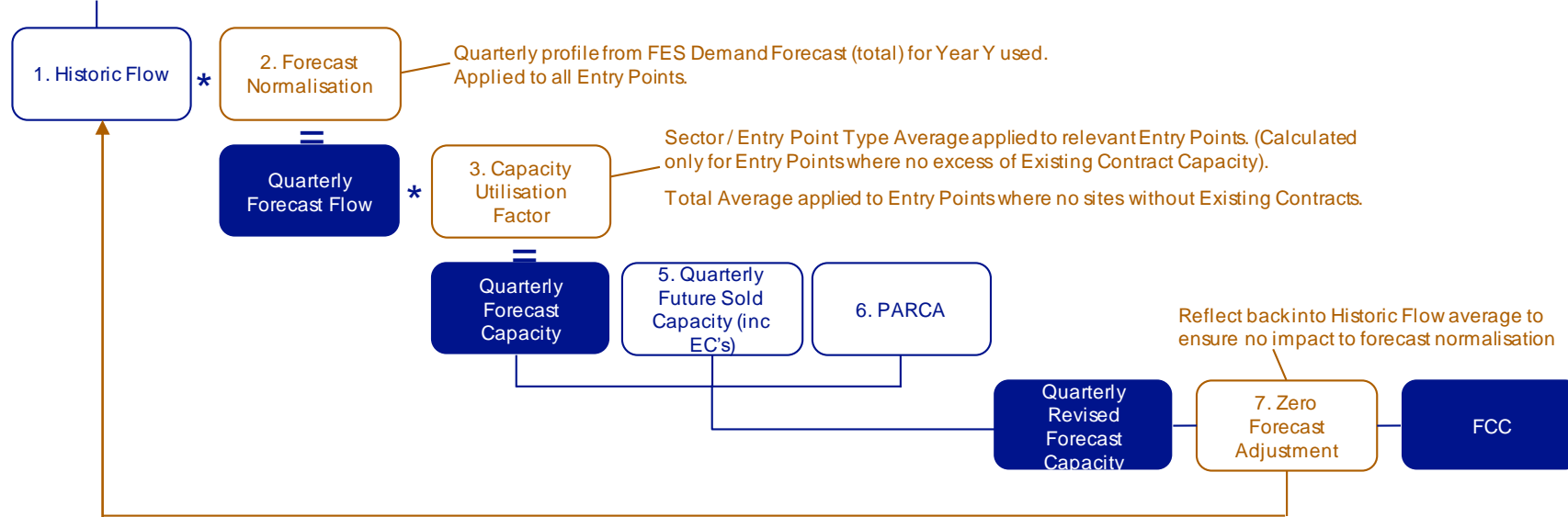
5. Future Sold Capacity

6. PARCA

- This example is based on taking the maximum of Flow/GDN Bookings, Future Sold and PARCA data.

Draft Proposal – Entry FCC Methodology

Collated by Entry Point at a quarterly profile over 5 years (Y-2 to Y-6) of historic flows,



Draft Proposal – Entry FCC Methodology

Entry Point Type kWh/d	FCC Oct 2020	Draft* FCC Oct 2021	Variance from Oct 2020	%	Q4 Variance from Forecast FCC
STORAGE SITE	1,498,713,162	1,453,139,724	-45,573,438	-3%	-11%
INTERCONNECTOR	178,627,070	118,946,132	-59,680,938	-33%	-12%
BEACH TERMINAL	2,647,252,684	2,164,354,440	-482,898,244	-18%	-15%
ONSHORE FIELD	14,936,971	11,875,295	-3,061,676	-20%	-48%
BIOMETHANE PLANT	500,000	500,000	0	0%	-
LNG	1,292,768,219	1,225,146,301	-67,621,918	-5%	17%**
TOTAL	5,632,798,106	4,973,961,893	-658,836,213	-12%	-7%
Existing Contract	3,853,587,697	3,513,712,187	-339,875,510	-6%	
Remaining Capacity	1,779,210,409	1,460,249,706	-318,960,703	-6%	

• Proof of Concept / indicative data values only.

** Q4 Forecast differential due to difference between phasing assumptions and EC winter/ summer profiles.

Draft Proposal – Entry FCC Methodology

Entry Point Type kWh/d October 2021	1) Historic Flows				2) Forecast Normalisation				3) Utilisation Factor			
	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
STORAGE SITE	94,597,469	175,750,555	84,246,083	75,049,350	94,597,469	175,750,555	84,246,083	75,049,350	100,416,583	186,561,760	89,428,438	79,665,972
INTERCONNECTOR	180,540,148	275,507,039	15,691,421	2,361,766	170,975,627	264,389,351	13,497,771	2,104,298	181,283,624	280,329,193	14,311,541	2,231,164
BEACH TERMINAL	2,201,348,087	2,380,191,760	1,737,234,768	1,570,761,855	2,084,726,725	2,284,142,565	1,494,370,462	1,399,525,204	2,317,395,443	2,539,067,355	1,661,151,679	1,555,721,088
ONSHORE FIELD	14,274,594	12,152,471	10,433,163	9,991,326	13,518,365	11,662,076	8,974,613	8,902,122	14,913,641	12,865,758	9,900,913	9,820,939
BIOMETHANE PLANT	0	0	0	0	0	0	0	0	0	0	0	0
LNG	358,126,283	401,469,442	357,229,953	197,438,296	339,153,738	385,268,723	307,289,435	175,914,554	374,158,936	425,033,604	339,005,811	194,071,287
TOTAL	2,848,886,580	3,245,071,267	2,204,835,388	1,855,602,592	2,702,971,924	3,121,213,270	1,908,378,364	1,661,495,526	2,988,168,228	3,443,857,670	2,113,798,383	1,841,510,451

* Proof of Concept / indicative data values only.

Draft Proposal – Entry FCC Methodology

Entry Point Type kWh/d October 2021	4) Future Sold Including Existing Contracts				5) PARCA				Applicable Quarterly Capacity Forecast				Draft* FCC October 21
	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	
STORAGE SITE	1,427,035,000	1,654,925,000	1,355,035,000	1,355,035,000	0	0	0	0	1,434,554,375	1,654,925,000	1,365,990,618	1,360,528,267	1,453,139,724
INTERCONNECTOR	27,150,000	151,502,392	0	0	0	0	0	0	181,283,624	280,329,193	14,311,541	2,231,164	118,946,132
BEACH TERMINAL	1,532,118,647	1,975,510,058	192,949,179	210,314,236	0	0	0	0	2,515,204,559	2,936,660,094	1,661,151,679	1,555,721,088	2,164,354,440
ONSHORE FIELD	0	0	0	0	0	0	0	0	14,913,641	12,865,758	9,900,913	9,820,939	11,875,295
BIOMETHANE PLANT	500,000	500,000	500,000	500,000	0	0	0	0	500,000	500,000	500,000	500,000	500,000
LNG	1,519,300,000	1,519,300,000	932,600,000	932,600,000	0	0	0	0	1,519,300,000	1,519,300,000	932,600,000	932,600,000	1,225,146,301
TOTAL	4,506,103,647	5,301,737,450	2,481,084,179	2,498,449,236	0	0	0	0	5,665,756,198	6,404,580,045	3,984,454,752	3,861,401,459	4,973,961,893

* Proof of Concept / indicative data values only.

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02 March 2021

FCC Development – Next Steps

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Next Steps:

- Provision of data to support what's been shared to date
- Drafting of the FCC Methodology for comment
- Iterative development on feedback, in preparation for consultation in March
- Aim to have the FCC Methodology in place for the end of March
 - Working within the methodology should not prevent use or application of any relevant or beneficial updates for the FCC and would require National Grid to explain any such condition.
- FCC itself we are aiming for end of April providing time to refine the FCC values and also understand the application into the potential prices.
- Throughout transparency is important for the methodology, the FCC and how the FCC Methodology has been applied.

High level timeline between now and May 2021:

Publication of
October 2021 Entry
and Exit Reserve
Prices

FCC
Updates

Weekly workshops, monthly NTSCMFs →

FCC Methodology
consultation

FCC Methodology
update in place

Updated FCC Values
for Charge Setting



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National

Period ahead of consultation on Methodology to be used to produce the FCC

Period of applying the methodology to determine FCC

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