

**Gas
Transmission**

Forecasted Contracted Capacity Workshop

11 February 2021

nationalgrid

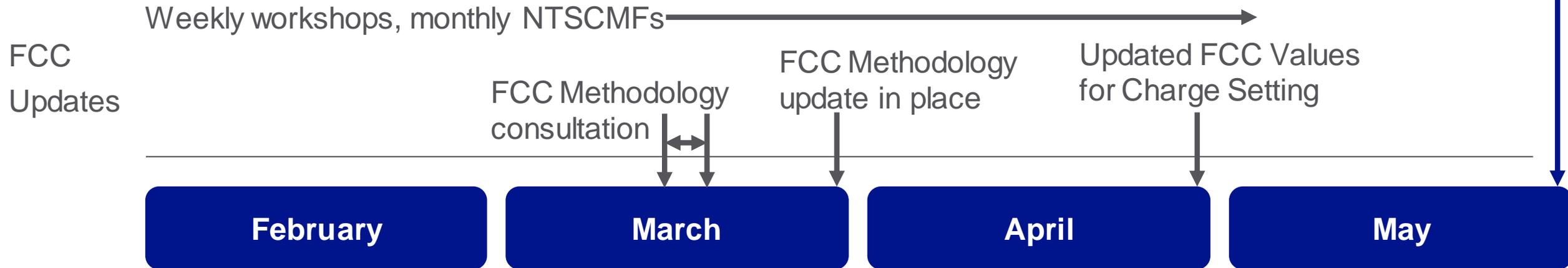


Agenda

- **Timetable to follow**
- **Reflections from initial discussion – areas of focus**
- **Initial proposal for review**
 - **Suggested constituent components into FCC**
 - **High level Exit review**

High level timeline between now and May 2021:

**Publication of
October 2021 Entry
and Exit Reserve
Prices**



Workshop	Agenda	Workshop	Agenda	Workshop	Agenda
11/02/2021	Exit draft	11/03/2021		08/04/2021	
18/02/2021	Entry draft	18/03/2021		15/04/2021	
25/02/2021		25/03/2021		22/04/2021	
04/03/2021		01/04/2021		29/04/2021	

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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Discussions and reflections from previous session

High level overview of what was discussed on 4th February:

- Debate on flows and utilisation and their likely use over previous inputs. Reflecting on the values closest to actuals based on the 2020 FCC there is no consistent pattern to identify. Overbooking is common across all sectors to varying degrees.
- Using the 'Max of' rule across all the inputs in the current methodology should be replaced with something more appropriate for 2021 onwards
- Profiling or monthly phasing does not impact the Annual FCC – it does have its place in the application to consider revenue recovery across the year however does not need to be considered upfront for the Annual FCC value
- Use of sector specific rules seem appropriate over a single Entry and / or Exit rule for FCC.
- Challenging to consider how to assess a summer under the new regime when the first summer period under it won't have completed by the time the FCC is set for October 2021.

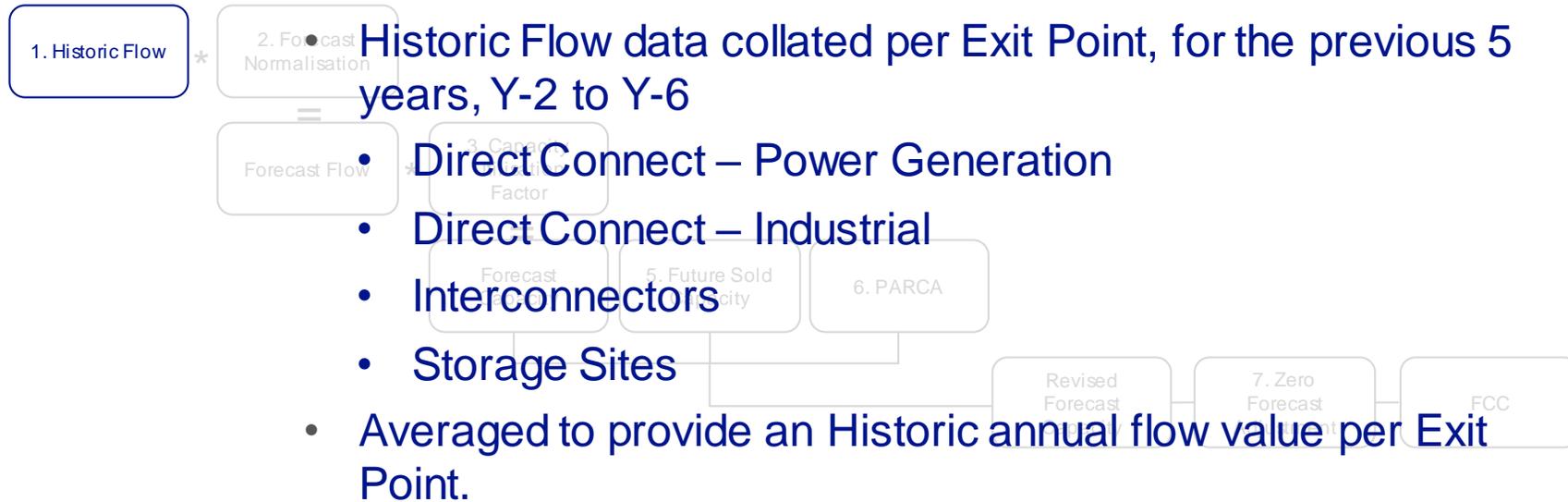
High Level Overview of proposal for comment for Exit

Approach is based on flows and capacity utilisation as key inputs

- Consider flow over previous 5 gas years by site type to calculate average flows
 - Demand by site type – correction factor to be added to average flows
 - Take into account the utilisation between Oct – Jan for gas year 20/21 – correction factor to be added to reflect flows to bookings
 - Exceptions can then be considered if numbers or any steps above yield anomalous values
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- Summary data for the above to be presented at the workshop on 11th February

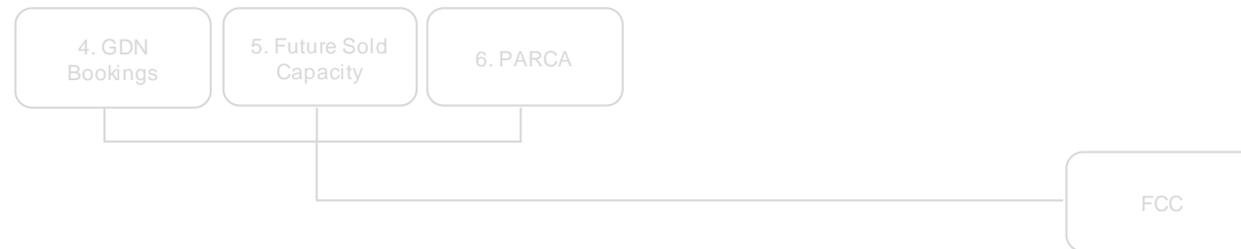
Draft Proposal – Exit FCC Methodology

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



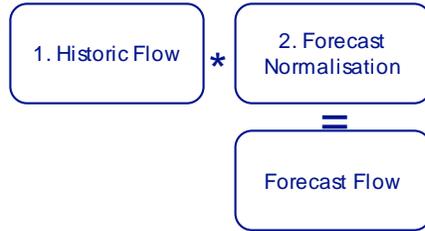
GDNs

- Divided by 365 to provide a kWh/d value per Exit Point.



Draft Proposal – Exit FCC Methodology

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



- Previous 5 years (Y-2 to Y-6) worth of flows by Sector / Exit Point type collected.
- Averaged to provide an annual forecast by Sector / Exit Point type value for the 5 years the historic flows per site have been collected for.
- Divided by FES forecast for year Y by Sector / Exit Point type, to calculate a normalisation value to reflect historic flow profiles into the latest demand value (applied per Sector / Exit Point Type)

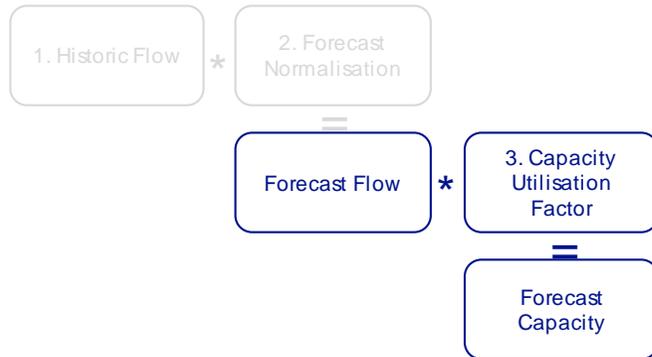
GDNs

- Historic Flow values per individual Exit Point multiplied by the applicable Sector / Exit Point type normalisation value to revise the forecast flow per site to reflect forecast demand for year Y.



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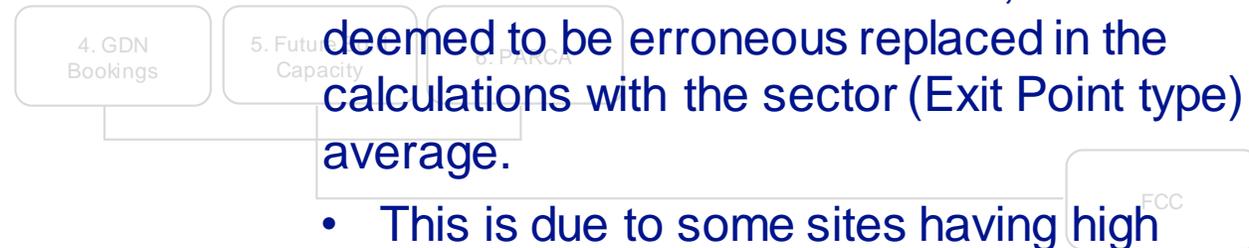


- Capacity Utilisation factor per site* applied to the Forecast Flow per site to account for capacity purchases above flow levels and calculate the Forecast Capacity.

- Capacity utilisation calculated per site based on capacity bookings and flows:

- Sum of capacity / Sum of flow
 - for October 2020 to January 2021 (4 months under the current regime)

GDNs

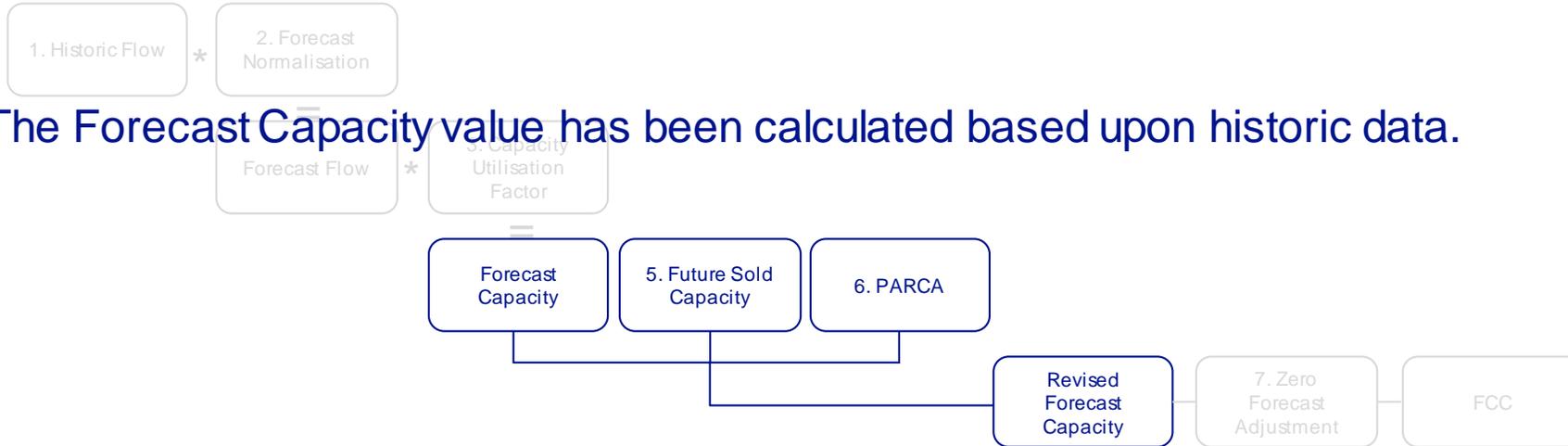


- * Individual site capacity utilisation value reviewed for each individual site, and where deemed to be erroneous replaced in the calculations with the sector (Exit Point type) average.

- This is due to some sites having high levels of capacity, but limited flows year to date which creates an artificially high Capacity Utilisation Factor.

Draft Proposal – Exit FCC Methodology

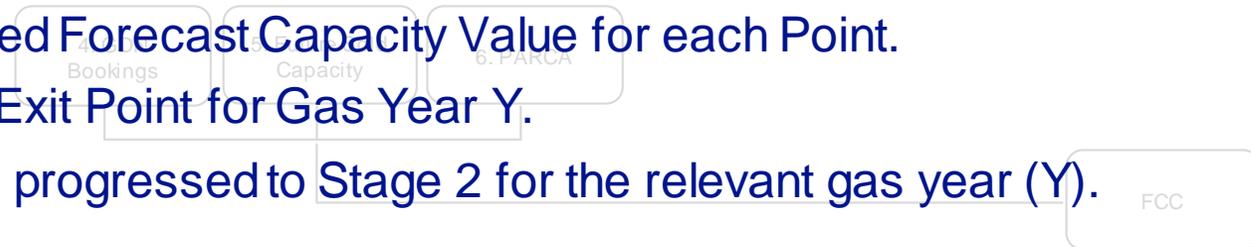
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- The Forecast Capacity value has been calculated based upon historic data.

- In order to account for any known future variations, 2 other values are collected for each Exit Point and an assessment is made of which of the three values is used to set the Revised Forecast Capacity Value for each Point.

- Sold Capacity per Exit Point for Gas Year Y.
- PARCAs that have progressed to Stage 2 for the relevant gas year (Y).



Draft Proposal – Exit FCC Methodology

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

- One of the key drivers behind the setting of the Revised Forecast Capacity value is historic flows.
- An assessment is undertaken for each exit point of the metric being used for each point to set that sites Revised Forecast Capacity Value:

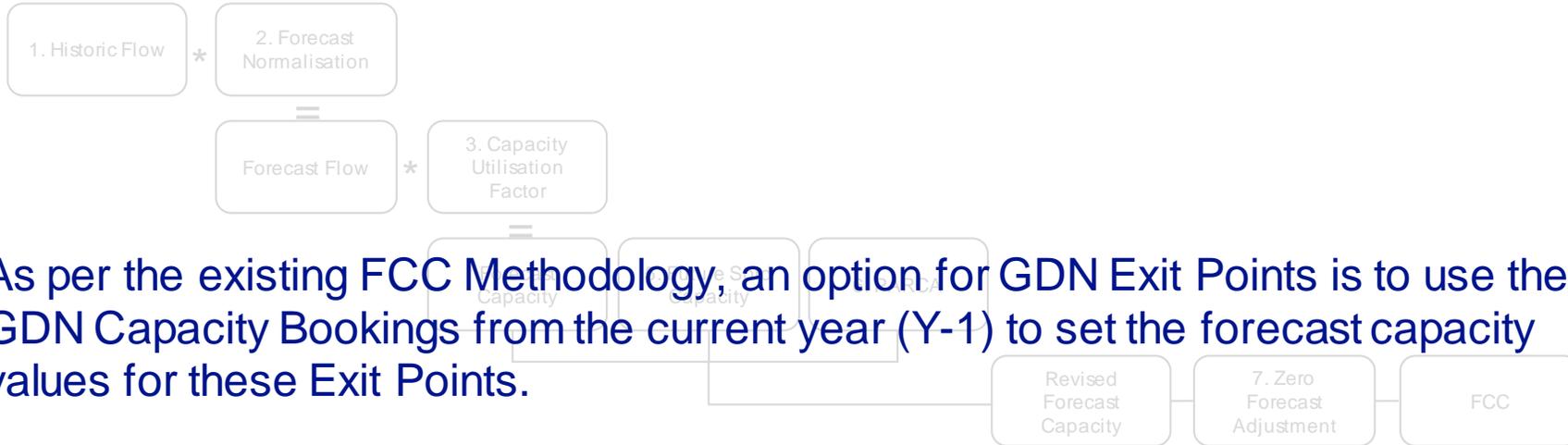
- Where an Exit Points Revised Capacity Value is set based on Historic Flows, and National Grid has intelligence that indicates that that Exit Point will be a zero flow site (not be flowing for Gas Year Y), then the Revised Capacity Value is replaced with 0.

- If a site with a forecast zero flow has its Revised Capacity Value set from Future Sold Capacity / PARCA then this is assessed further.
- FCC for these Exit Points set based on each Exit Points Revised Forecast Capacity value minus any Zero Forecast Adjustments.

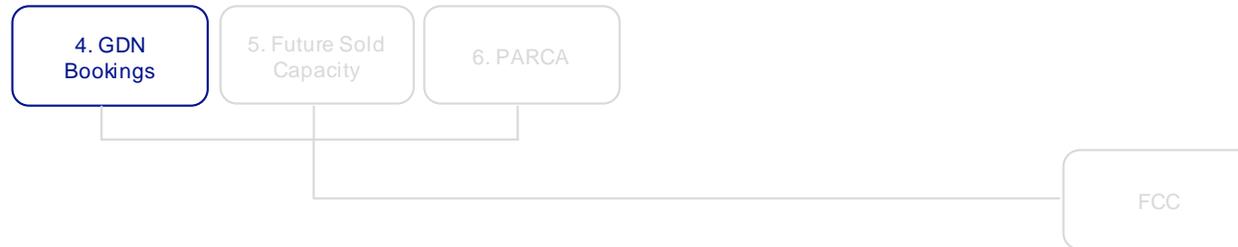


Draft Proposal – Exit FCC Methodology

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



GDNs

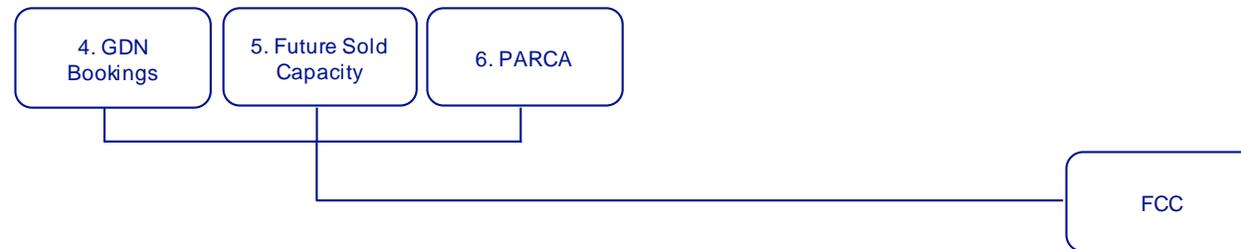


Draft Proposal – Exit FCC Methodology

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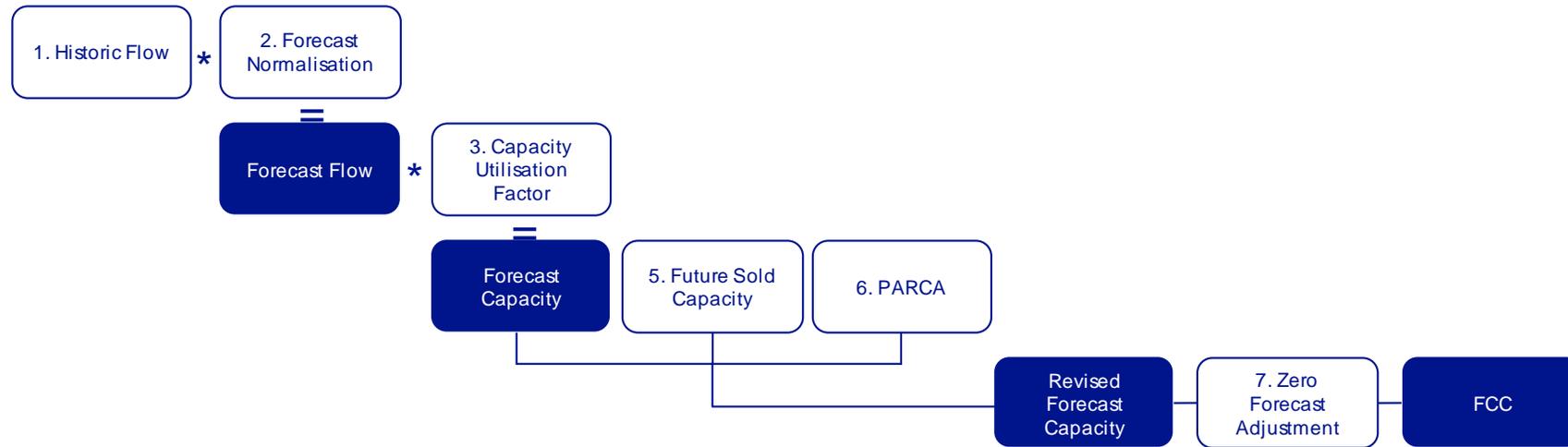
- GDN Bookings are based on Y-1.
- Consistent with the approach for other Exit Points, in order to account for any known future variations, 2 other values are collected, and an assessment is made of which of the three values is used to set the FCC for each GDN Exit Point.
 - Sold capacity per Exit Point for Gas Year Y.
 - PARCAs that have progressed to Stage 2 for the relevant gas year (Y).

GDNs

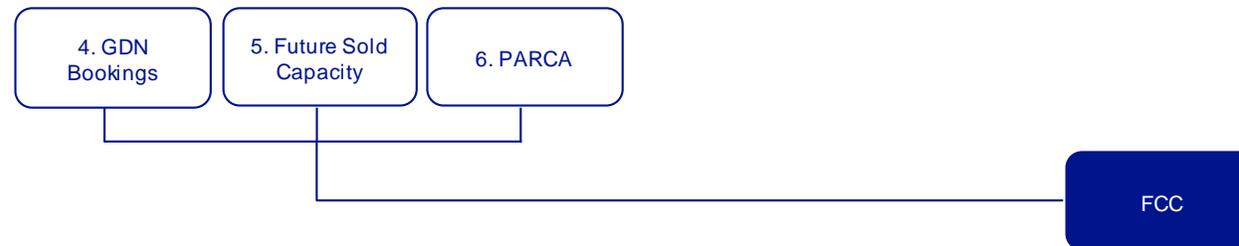


Draft Proposal – Exit FCC Methodology

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



GDNs



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

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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	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%



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