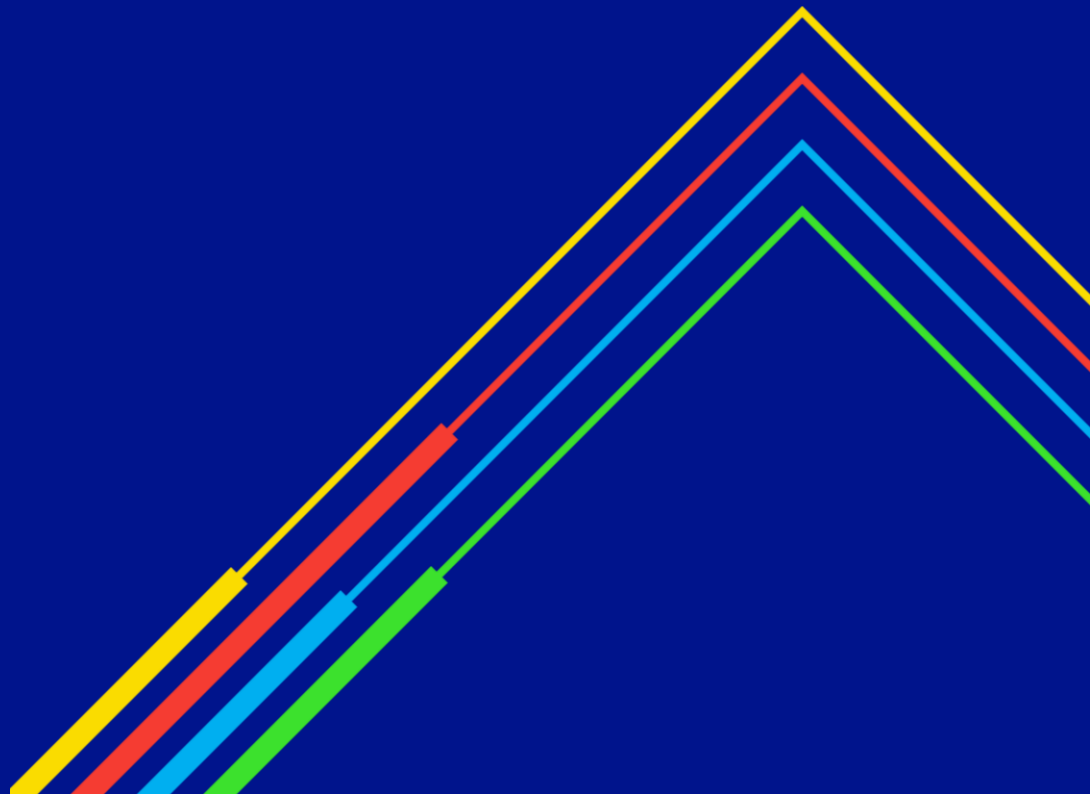


Capacity Access Review

Transmission Workgroup
5th August 2021

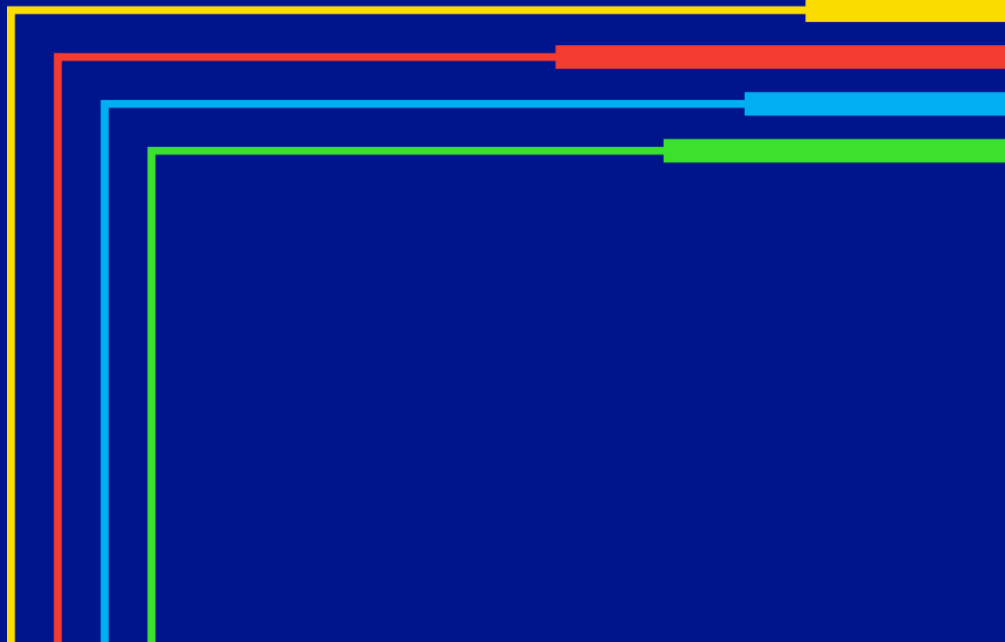
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01

Exit User Commitment

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User commitment & incremental capacity

In their reply to NTS consultation on the Exit Capacity Methodology Statement GDNs expressed a view that:

'...where investment is not needed, UC should not apply (including requests above Baseline) as there appears to be no justification for passing these costs on to the end Customer. In addition, as highlighted in the main consultation on the Capacity Methodology Statements, during RIIO2 the GDNs have to meet new requirements in the Exit Capacity Planning Guidance which are designed to result in GDNs booking a level of NTS Exit Capacity that effectively and efficiently provides for their 1-in-20 demand forecast. As the only driver is to secure Peak Day capacity, it could be argued the GDNs incurring UC (in any form) an unnecessary and potentially, inefficient element of the bookings process from a whole system perspective.'

NTS continues to evaluate the risks related to reduction of user commitment for incremental capacity where the signal can be fulfilled by substitution. We have been considering different outcomes which might materialise as a result of this potential change.

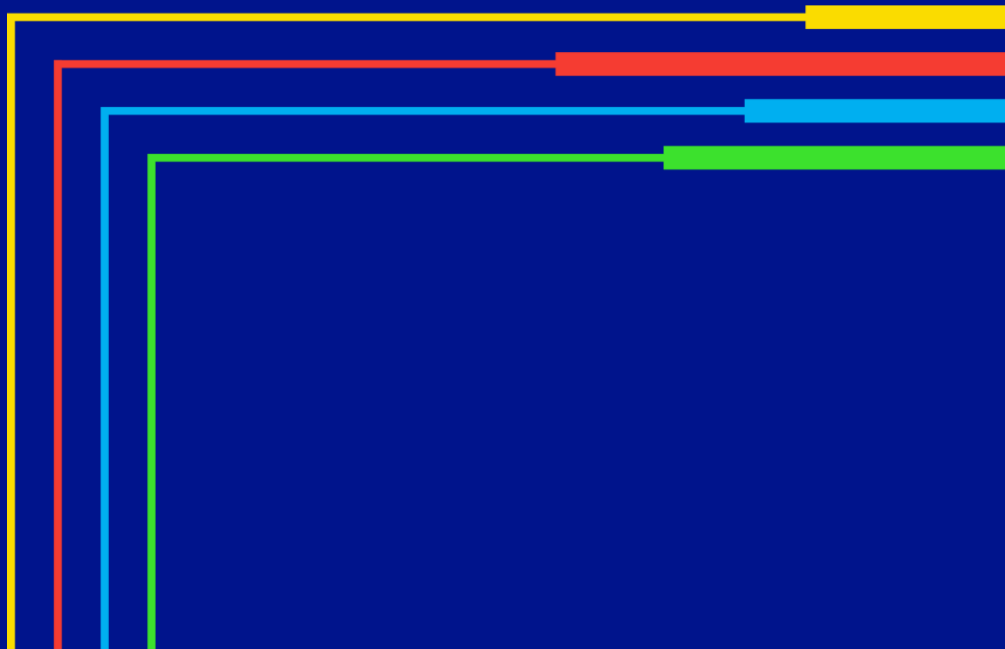
Analysis

No	UC ending	Increase to	Indicative Price(p/kWh)	UC Amount(£) - monthly	Actual Price - Effective Year 1 (p/kWh)	Actual Invoice (£)- monthly	UC duration	UC Amount based on indicative	Actual UC paid	UC Amount (based on 2021 reserve price)=Reserve price/100 xQ (booking quantity) x 730 (2YEARS)
1	01-Jan-19	15,190,000	0.0108	45,934.56	0.0001	425.32	48	2,195,015.76	20,324.22	2,339,715.70
2	01-Feb-19	21,900,000	0.0001	678.90	0.0002	1,357.80	24	32,258.70	35,138.50	3,373,257.00
3	01-Sep-19	20,919,521	0.0065	42,152.83	0.0001	648.51	48	1,986,622.25	328,352.97	3,222,233.82
4	01-Sep-19	5,046,154	0.0005	782.15	0.0011	1,720.74	14	33,546.12	36,014.41	777,259.10
5	01-Sep-19	2,432,914	0.0136	10,257.17	0.0077	5,807.37	48	483,410.43	310,104.12	374,741.74
6	01-Sep-19	46,858,561	0.0001	1,452.62	0.0001	1,452.62	48	68,460.54	68,460.54	7,217,624.15
7	01-Sep-19	6,921,484	0.0077	16,521.58	0.0018	3,862.19	48	778,646.15	260,337.77	1,066,116.18
8	01-Sep-19	40,231,974	0.0065	81,067.43	0.0001	1,247.19	48	3,820,629.48	2,481,749.55	6,196,930.96
9	01-Sep-19	27,391,725	0.0223	189,358.99	0.0117	99,349.79	48	8,924,306.04	7,271,736.03	4,219,147.40
10	01-Sep-19	49,258,990	0.0354	540,568.16	0.0242	369,540.94	48	25,476,454.12	18,674,674.23	7,587,362.23
11	01-Mar-20	15,190,000	0.0108	5,227.20	0.0001	48.40	48	1,159,131.60	10,732.70	2,339,715.70
12	01-Sep-20	1,055,917	0.0001	32.73	0.0001	32.73	48	1542.65	1542.65	162,642.90
13	01-Sep-20	121,200,000	0.0001	3,757.20	0.0007	26,300.40	7	177,073.20	179,860.80	18,668,436.00
14	01-Sep-21	72,938,900	0.0037	83,660.92	0.0001	2,261.11	44	3,942,858.18	4,016,453.57	11,234,778.77
15	01-Sep-21	42,637,000	0.0055	72,696.09	0.0198	72,696.09	40	3,426,096.28	3,624,912.53	6,567,377.11
16	01-Sep-21	29,209,411	0.0301	272,553.01	0.0265	239,955.31	48	12,845,159.67	10,787,356.79	4,499,125.58
17	01-Sep-21	100,000	0.026	806.00	0.0224	694.40	48	37,986.00	32,327.80	15,403.00
Average			0.0105		0.1168		41			
Total								65,389,197.17	48,140,079.18	79,861,867.33

02

Movement of capacity between exit points

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Principles

Principle	Applicability
Users	Any party operating under the same shipper licence wanting to move capacity between offtakes.
Request submission process	Part of ECPG (July request submission for Y+1 Oct effective bookings)/ combined submission with Section H demand forecast. Would need to be developed for directly connected customers.
Reason for request	Any; change in demand forecast/ better network synchronisation/offtake becomes inactive/disconnected.
Duration	Ongoing from the date it is applicable to expiry of capacity holding.
Type of capacity to be swapped	Annual/enduring obligated capacity. Annual – annual, enduring – enduring.
Location of swap out/in	Predominantly LDZs, but movement between other locations can be considered if required.
Volume	Unlimited, but subject to NTS approval
Liability	Liability for capacity is to be moved to the 'swap in' location
Impact analysis	Network Capability will need to conduct the analysis to determine the impact of the changes requested.
Exchange rates	Where the exchange rates are to be determined, is 3:1 rule to be applicable? Assuming the donor site goes against the substitution methodology principles which calls for most efficient offtake to donate capacity (would this process call for an exemption to this rule?)
System impact	Systemised solution
Baseline	TBC

Capacity movement in July 2021 window

We have asked GDNs to share information on what capacity they would have moved, had the capacity movement process been in place in this July window. The data collected indicates that we would have received 21 requests:

- approx. total of 12mcm/day of capacity would have been moved
- capacity would be moved between offtakes within baseline, but also from offtakes with incremental user commitment to offtakes within baseline

With additional potential requests from directly connected customers, we anticipate this process to be substantially adding to complexity of analysis conducted currently in the July window.

In the past we have shared information about how long the substitution analysis take (7-14 weeks). Although analysis in this instance will be more straightforward (donor/recipient will be determined), we are investigating whether a more efficient methods to determine the impact of requested capacity movement on NTS can be found.

Offtakes in close geographical proximity

There are a number of locations on the network where 2 offtakes are located in a very close proximity.

In NTS Licence these locations are listed as 2 separate offtakes.

Examples

Farningham GDN (SE)

Farningham B GDN (SE)

Braishfield A GDN (SO)

Braishfield B GDN (SO)

Ipsden GDN (SO)

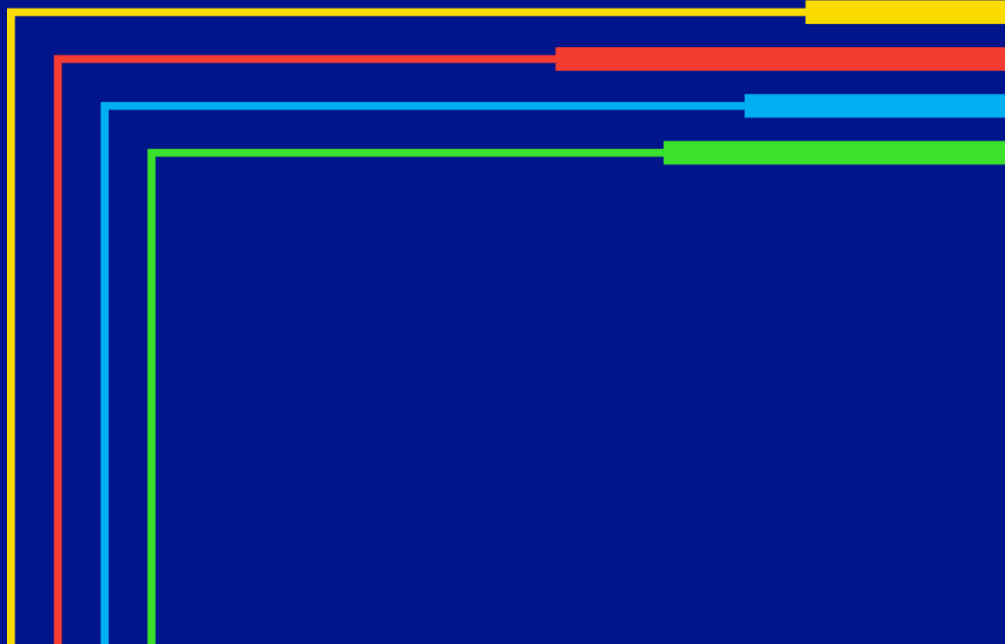
Ipsden 2 GDN (SO)

Capacity movement between these locations doesn't make a big difference to NTS capability, but enabling it could allow customers to better manage their flows.

03

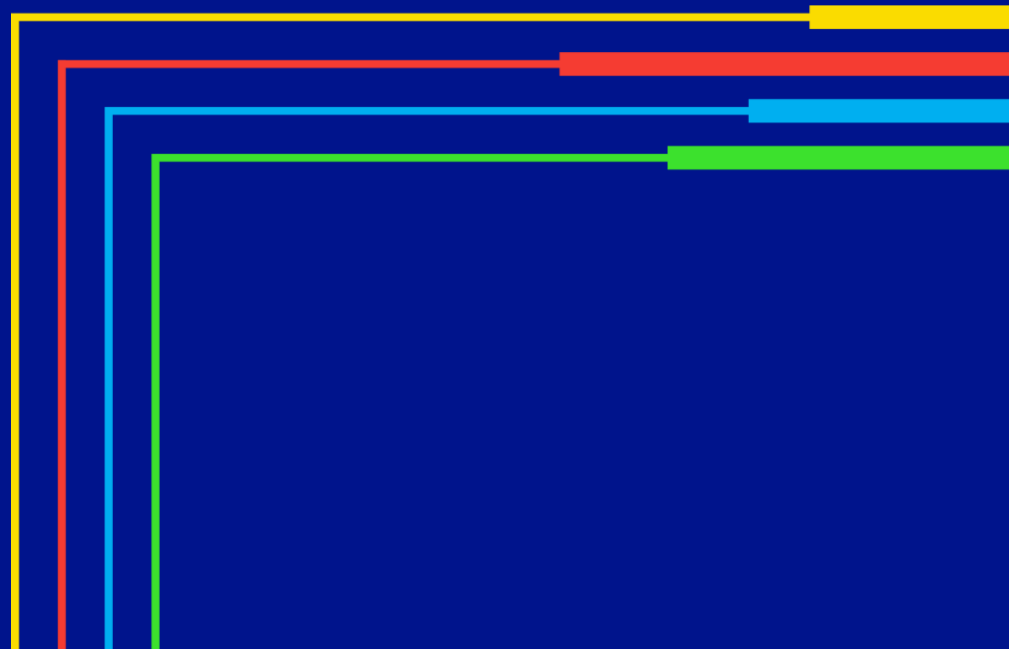
Entry Capacity Assignments

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04

Overruns



Entry data (October 2020 – May 2021)

Action 0701: National Grid (ASt) to present a detailed review of overruns for the Workgroup.

	No of Overruns		Charge Quantity (mcm)		Charge Amount (£)		No of Users		No of ASEPs	
	20/21	19/20	20/21	19/20	20/21	19/20	20/21	19/20	20/21	19/20
Oct	319	129	10.84	3.40	270,470.21	34,373.94	31	21	9	8
Nov	369	98	15.83	3.77	442,615.19	10,749.94	25	17	8	9
Dec	403	123	7.63	5.41	180,741.39	35,823.08	26	18	10	7
Jan	379	200	8.73	6.64	203,889.59	69,319.21	23	25	8	10
Feb	410	117	8.31	2.93	196,899.49	30,807.88	24	15	8	8
Mar	500	160	10.90	6.48	273,012.66	82,350.69	24	24	8	7
Apr	565	146	25.93	15.64	606,193.82	57,607.67	29	20	8	9
May	551	141	9.93	3.55	227,449.21	36,474.81	29	17	10	6
Total*	3496	1114	98.10	47.82	2,401,271.56	357,507.22	211	157		

Exit data (October 2020 – May 2021)

	No of Overruns		Charge Quantity (mcm)		Charge Amount (£)		No of Users		No of Offtakes	
	20/21	19/20	20/21	19/20	20/21	19/20	20/21	19/20	20/21	19/20
Oct	137	1	9.11	0.21	111,795	2,874.67	16	1	28	1
Nov	158	0	8.40	-	102,316.93	-	19	-	30	0
Dec	178	0	8.53	-	96,007.55	-	21	-	31	0
Jan	142	2	10.25	0.02	131,626.60	1.32	17	1	31	2
Feb	166	8	8.59	1.24	92,831.55	8,746.03	15	4	29	4
Mar	144	5	3.12	0.22	38,972.44	19.52	15	3	25	3
Apr	218	0	6.85	0.00	83,208.21	0	20	0	34	
May	179	2	5.45	0.61	66,865.05	6906.76	20	2	31	2
Total	1322	18	60.28	2.29	723,623.20	18,548.30	143	11		

Tolerance

The industry identified a need for an introduction of a tolerance in relation to overrun charges due to many overrun occurring within 3-5% of the capacity booking made.

The table below demonstrate what the current tolerance rules for scheduling charges looks like. (N.B. scheduling charges are payable if flows exceed nominations).

Nomination Tolerance	Quantity	Scheduling Charge
First 3% of nomination	Deadband	No charge
3-5%	First Chargeable Input Scheduling Quantity	Quantity multiplied 2% of the System Average Price for the Gas Flow Day
5% +	Second Chargeable Input Scheduling Quantity	Quantity multiplied 5% of the System Average Price for the Gas Flow Day

Overruns v costs

Action 0702: National Grid (ASt) to provide analysis (including driver for charges feeding into overruns) to the Workgroup for review.

Recap of data shared within Transmission Workgroup in March 2020

- At Entry points, in a 4 month winter period 2017/18 capacity was scaled back on 20 occasions, out of which 8 occurred on the same day/locations as Overruns
- At Exit points, capacity was scaled back on 1st March 2018 (1 location affected by an Overrun where capacity was scaled back)
- NTS is operated in a consolidated manner where actions are taken as a result of multiple influencing factors. It is not possible to quantify the specific impact Overruns have on network configuration.
- The 8 times multiplier is used for instances where there is no constraint requiring National Grid to take action. Where there is a constraint which results in e.g. buy backs, a different multiplier is used for the overrun calculation

UNC B2.12.3

(8 * A), where 'A' is the **highest bid price** in relation to a capacity bid in respect of which NTS Entry Capacity was allocated

(1.1 * B), where 'B' is the relevant average accepted **offer price**

(1.1 * C), where 'C' is the relevant average accepted **forward price**

(1.1 * D), where 'D' is the relevant average accepted **exercise price**

(1.1 * E), where 'E' is the highest **unit price** accepted by National Grid NTS

Reasons for overruns

Entry

- Human error:
 - o missed the last purchasing window due to busy nightshift
 - o booking capacity under a wrong shipper code
 - o using systems which aren't synchronised with Gemini adds complexity/room for making errors
- Wrong information from the production fields i.e. the actual allocation is higher than expected or
- Information from the production field arrives last minute or very late not allowing to accurately amend existing capacity holdings
- Upstream contractual arrangements with the producers allow little or no flexibility i.e. gas starts flowing even though information Users receive confirms there will be no injection

Exit

- Benefits on electricity balancing market outweigh the penalty on the gas side
- Inaccurate forecasting of the 5 remaining hours of the day (gas consumption of the assets)

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