Capacity Access Review

Transmission Workgroup
7th October

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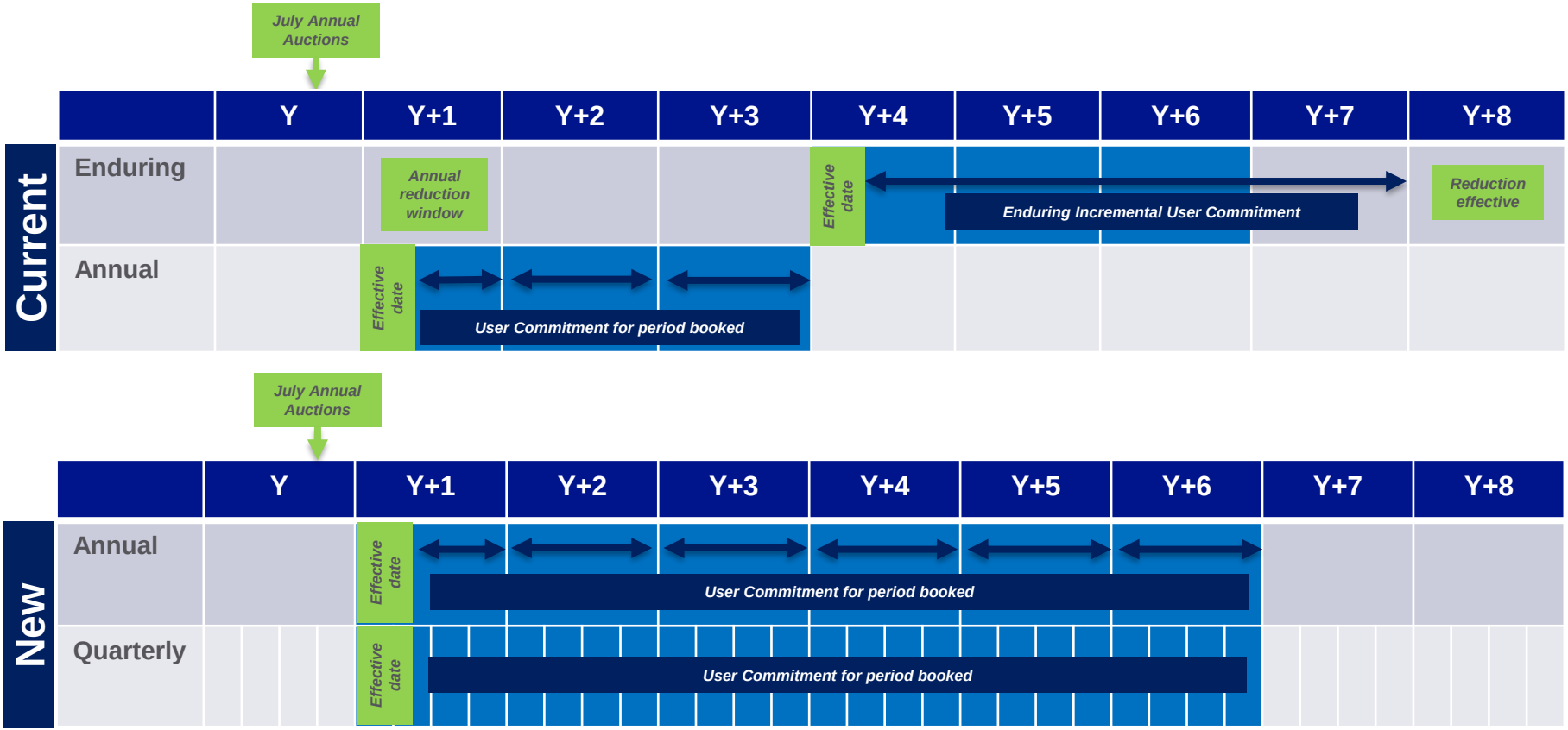
Enduring product replacement – impact on UC



Incremental capacity triggered through PARCA

There is a risk that reducing User Commitment could lead to and increased requirement for substitution analysis

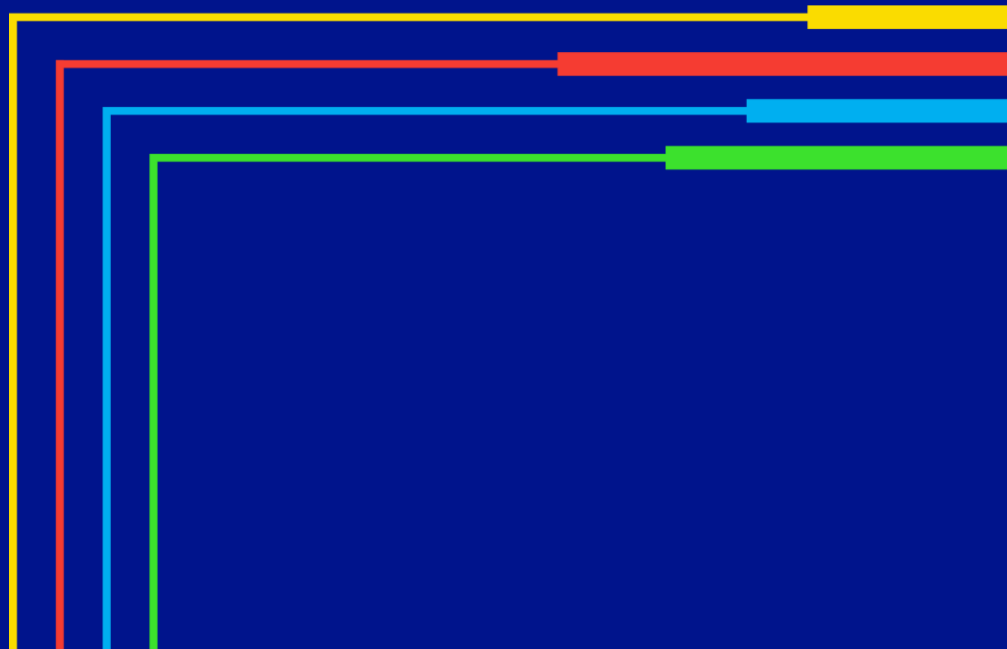
- Historically substitution analysis has taken between 7-14 weeks to carry out
- NG is funded through RIIO-2 to carry out a particular volume of substitution analysis based on passed requirements

A further option could be that the long-term auction is retained for baseline capacity bookings, however incremental bookings are made through the PARCA process

- Additional advantage of providing consistent levels of information

02

Moving Capacity between offtake points



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Request acceptance/rejection criteria

When looking at the impact of capacity movement on NTS we will focus on pressures rather than trying to determine exchange rates for each individual request.

Where pressure drops significantly, we will assume the exchange rate is not close to 1:1 and reject the capacity movement request. To give the industry clarity as to why the request is being rejected, we would share what the pressure drop would be and/or what potential impact the request could have if it was accepted - examples (as per Network Planning Code):

- Be unsustainable with planned and actual infrastructure
- Require investments to be brought forward in the investment plan
- Increase operational costs (particularly compression costs)
- Reduce capability at NTS Entry Points
- Reduce available system flexibility capacity
- Impact on other offtake points in the area

If more than one request is put forward for capacity movement within the same Network Exit Capability Zone by one Shipper/Transporter, an overall impact would be measured and the acceptance/rejection decision will be based on the accumulative outcome of the assessment made. *(N.B if capacity is moved between 2 specific Exit Points which are in different Network Exit Capability Zones, the outcome of the assessment will be determined by looking at the exchange rate rather than the pressure impact)*

Analysis – example 1

LDZ	Offtake		Applicable from (dd/mm/yy)	Quantity (mcm/d)	Exchange rates
	From	To			
LDZ1	Offtake 1	Offtake 2	01/10/2021	0.75	2.4:1
LDZ1	Offtake 1	Offtake 3		0.85	1.7:1
LDZ1	Offtake 1	Offtake 4		0.67	1.6:1
LDZ1	Offtake 1	Offtake 5		1.86	2.2:1

Assumption is being made that if the impact on NTS pressures is minimal, the exchange is 1:1

N.B This method follows similar approach we take to conduct substitution analysis i.e. when choosing donor sites for substitution we are looking for the best exchange rate (solution with minimal impact on pressure drop).

This capacity movement request would be **rejected**.

Largest pressure drops

Offtake	Original pressure	Pressure after movement	Difference
Offtake A	56.44	54.11	-2.33
Offtake B	56.44	54.11	-2.33
Offtake C	53.06	50.11	-2.95
Offtake D	53.05	50.11	-2.94
Offtake E	55.96	53.61	-2.35
Offtake F	48.15	43.88	**-4.27**

Largest pressure increases

Offtake	Original pressure	Pressure after movement	Difference
Offtake G	50.50	52.92	2.42
Offtake H	50.50	52.92	2.42
Offtake I	51.66	54.01	2.35
Offtake J	58.95	63.16	4.21
Offtake K	58.95	63.17	4.22
Offtake L	58.95	63.16	4.21

Significant pressure loss along FDR[X], particularly at extremity (offtake F obligation is 45)

Analysis – example 2

LDZ	Offtake		Applicable from (dd/mm/yy)	Quantity (mcm/d)	Exchange rate
	From	To			
LDZ 2	Offtake 1	Offtake 2	1/10/2021	0.676	1:1
LDZ 2	Offtake 1	Offtake 3		0.676	1.02:1
LDZ 2	Offtake 1	Offtake 4		0.136	1:1

This capacity movement request would be **accepted.**

Largest pressure drops

Offtake	Original pressure	Pressure after movement	Difference
Offtake X	54.10	54.05	-0.05

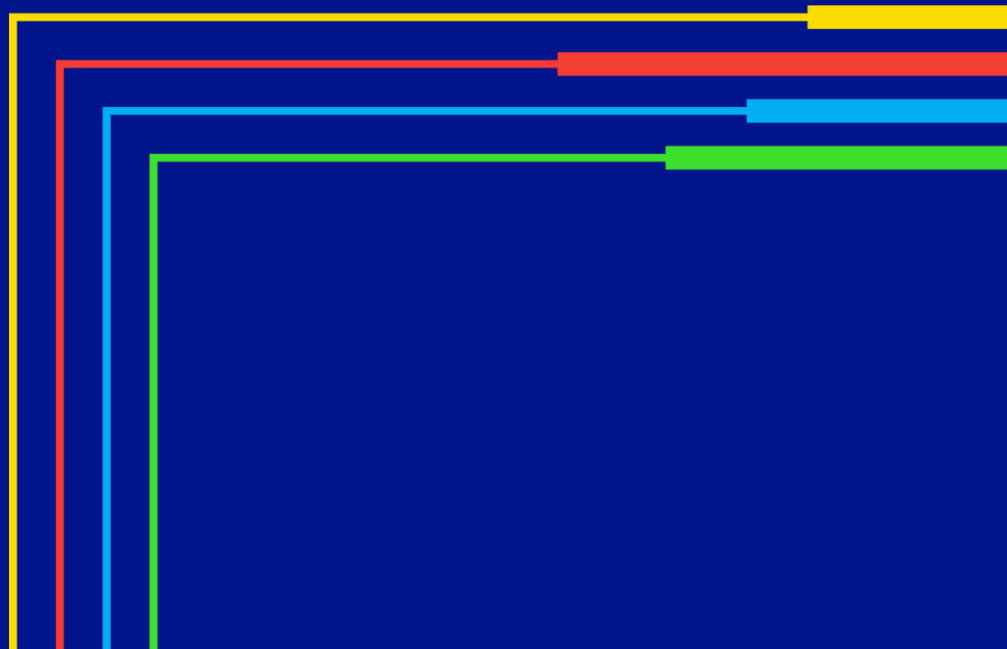
Favourable movement of capacity for pressures on the network

Largest pressure increases

Offtake	Original pressure	Pressure after movement	Difference
Offtake A	50.50	52.02	1.52
Offtake B	50.50	52.02	1.52
Offtake C	63.95	64.32	0.37
Offtake D	54.48	55.67	1.19
Offtake E	62.91	63.33	0.42
Offtake F	62.91	63.33	0.42
Offtake G	51.66	53.02	1.36
Offtake H	58.95	59.61	0.66
Offtake I	58.95	59.61	0.66
Offtake J	58.95	59.61	0.66

03

Overruns



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Entry data (October 2020 – July 2021)

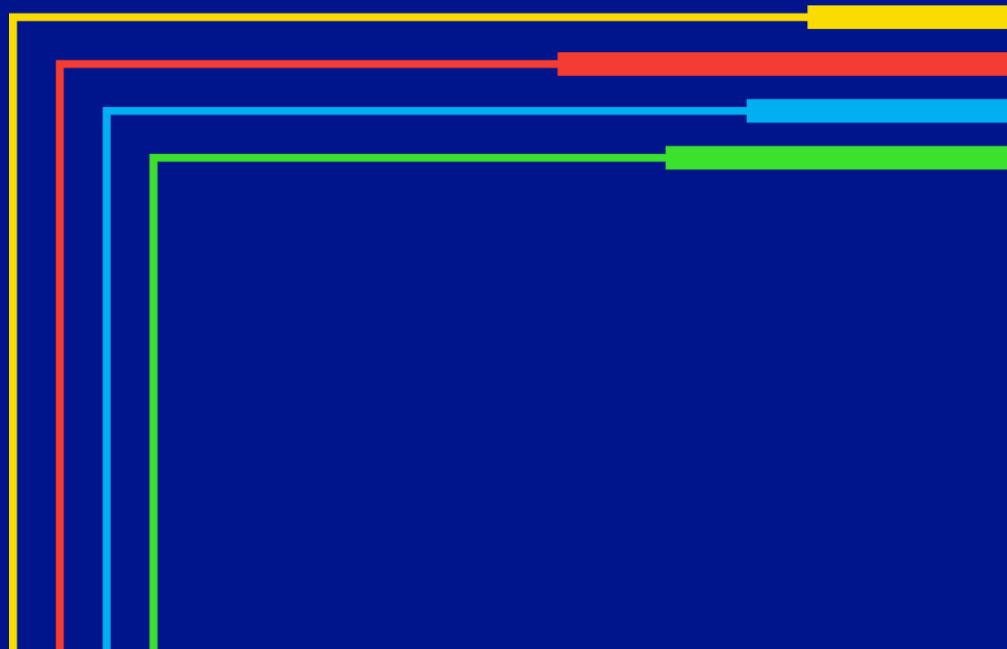
	No of Overruns		Charge Quantity (mcm)		Charge Amount (£)		No of Users		No of ASEPs	
	20/21	19/20	20/21	19/20	20/21	19/20	20/21	19/20	20/21	19/20
Oct	319	129	10.84	3.40	270,470.21	34,373.94	31	21	9	8
Nov	369	98	15.83	3.77	442,615.19	10,749.94	25	17	8	9
Dec	403	123	7.63	5.41	180,741.39	35,823.08	26	18	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
Jun	405	132	12.82	2.43	303,336.73	26,130.22	26	18	8	8
Jul	416	130	10.99	3.50	260,174.05	27,093.50	25	17	7	7
Total*	4317	1376	121.91	53.75	2,704,608.29	410,730.94	262	192		

*Including negative overruns

Exit data (October 2020 – July 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	6,906.76	20	2	31	2
Jun	121	7	2.74	0.18	35,604.23	4,786.78	15	3	26	3
Jul	163	15	4.82	13.27	50,184.96	2,275.51	17	12	27	3
Total	1606	40	67.85	15.74	809,412.39	23,335.08	175	26		

Appendix



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Baseline to baseline scenario

Baseline to baseline	Point A	Point B	Total
Baseline before	100	100	200
Current booking	90	80	170
Capacity moved	-10	10	
New/net (fully adjusted) total capacity	80	90	
Net position (invoiced)	80	**80+10**	170
UDQO	100	100	
Overrun quantity	20	10	
Baseline after	100	100	200

- This scenario will be beneficial if 2 year User Commitment on baseline capacity will be maintained
- If User Commitment for baseline capacity is reduced to 0 for GDNs, GDNs will use the July window to reduce booking at Point A and increase at Point B rather than using the capacity movement process. Directly connected Users might still find the process useful.
- User Commitment will be payable on the remaining of the 2 year commitment period at point B on **10** Units *(in addition to exiting commitment on Point B on **80**, if any)* – User Commitment continues rather than restarts.
- If you didn't have any User Commitment at Point A, you wouldn't incur any once capacity moved
- Baseline will not change

Baseline to Incremental scenario

Baseline to incremental	Point A	Point B	Total
Baseline before	100	100	200
Current booking	90	80	170
Capacity moved	-45	45	
New/net (fully adjusted) total capacity	45	125	
Net position (invoiced)	45	**80+45**	170
UDQO	120	120	
Overrun quantity	*-75*	*0*	
Baseline after	55	145	200

- [4] year User Commitment starts on **125** units at point B once capacity is moved
- Potentially only beneficial if Users have existing User Commitment on baseline capacity at Point A (if not, Users would be able to do this via current process of booking reduction and increase in the July window)
- *Point A continues being liable for the User Commitment on 45, if applicable*
- Baselines will be changed

Incremental to Baseline scenario

Incremental to Baseline	Point A	Point B	Total
Baseline	100(110)	100	210
Current booking	110	70	180
Capacity moved	-20	20	
New total capacity	90	90	
Net position (invoiced)	**90**	**70+20**	180
UDQO	120	120	
Overrun quantity	*-30*	*-30*	
Baseline	90	120	210

- [4] year User Commitment continues at Point A on **90** units
- Remaining of [4] year User Commitment continues being paid on **20** units moved to Point B (in addition to existing commitment, if any, on **70**)
- Baselines will change

Incremental to Incremental scenario

Incremental to Incremental	Point A	Point B	Total
Baseline	100(120)	100(110)	230
Current booking	120	110	230
Capacity moved	-10	10	
New/net (fully adjusted) total capacity	110	120	
Net position (invoiced)	**110**	**110+10**	230
UDQO	150	150	
Overrun quantity	*-40*	*-30*	
Baseline	110	120	230

- Point A: User Commitment continues being paid on **110** for the rest of commitment period
- Point B: User Commitment at point B continues being paid on **110** units plus remaining commitment from point A (**10** units)
- Baselines will need to be updated

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