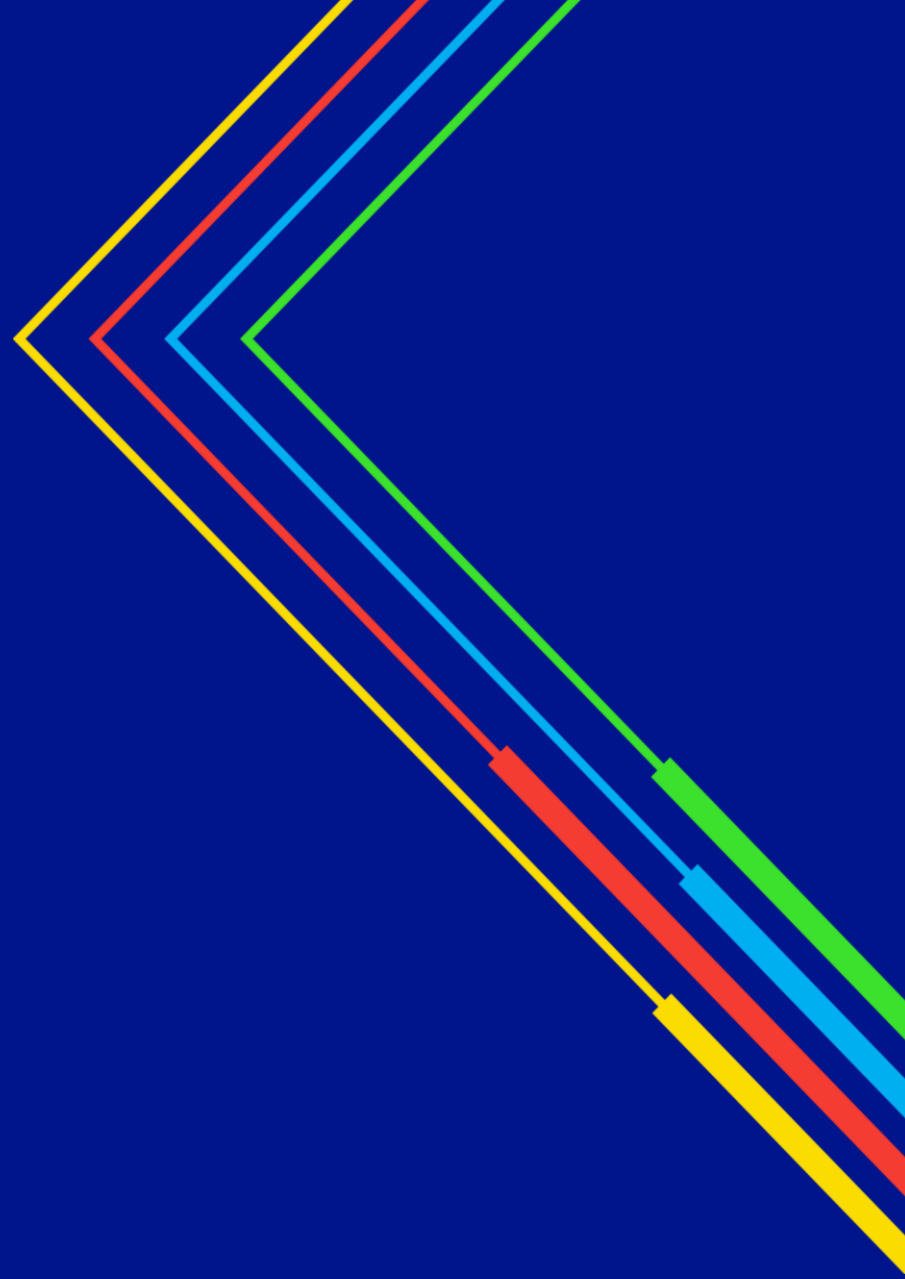


UNC Mod 0716: Revision of Overrun Charge Multiplier

Transmission Workgroup
5th March 2020

nationalgrid



Revenue and Overruns

New Action 0204: Do overrun charges link to the non-transmission charges post charging review implementation?

- No change. Exit overrun charges will be a part of non-transmission charges in the new charging regime.

New Action 0203: To what extent are there existing contracts with a close to zero reserve price which could lead to near zero Overrun charges.

- If the only User at an Entry point is the existing contract owner, the Overrun calculation will be based on contractual capacity price
- If another User Overruns at Entry point where existing contract exists, the Overrun calculation will be based on the highest bid price (reserve price or above)
- Having reviewed Overrun data for 2018/19, all Overrun calculations except for 1 could have been traced back to reserve price

Overruns and Constraints

Action 0201: National Grid to investigate situations whereby an Overrun might have been caused by a constraint on the network.

- 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

Overruns and Constraints

Overruns on the same days as Constraints in 2017/18 & 2018/2019

Location	Gas Day	Overrun Quantity (kWh)	Overrun Price (p/kWh)	Overrun Amount(£)
BI-Bacton IP	03/12/17	1,831,500	0.0872	£1,597.07
BI-Bacton IP	12/12/17	4,255,662	0.0872	£3,710.94
BU-Bacton UKCS	12/12/17	4,880,130	0.0752	£3,669.86
BU-Bacton UKCS	29/12/17	10,976,008	0.0752	£8,253.96
BI-Bacton IP	02/01/18	1,110,000	0.2234	£2,479.74
BU-Bacton UKCS	09/01/18	1,953,931	0.0720	£1,406.83
BI-Bacton IP	05/03/18	83,249,970	0.0872	£72,593.97
BU-Bacton UKCS	05/03/18	130,576	0.0720	£94.01
SEABANKOT-SEABANK	01/03/18	471,314	0.2216	£1,044.43

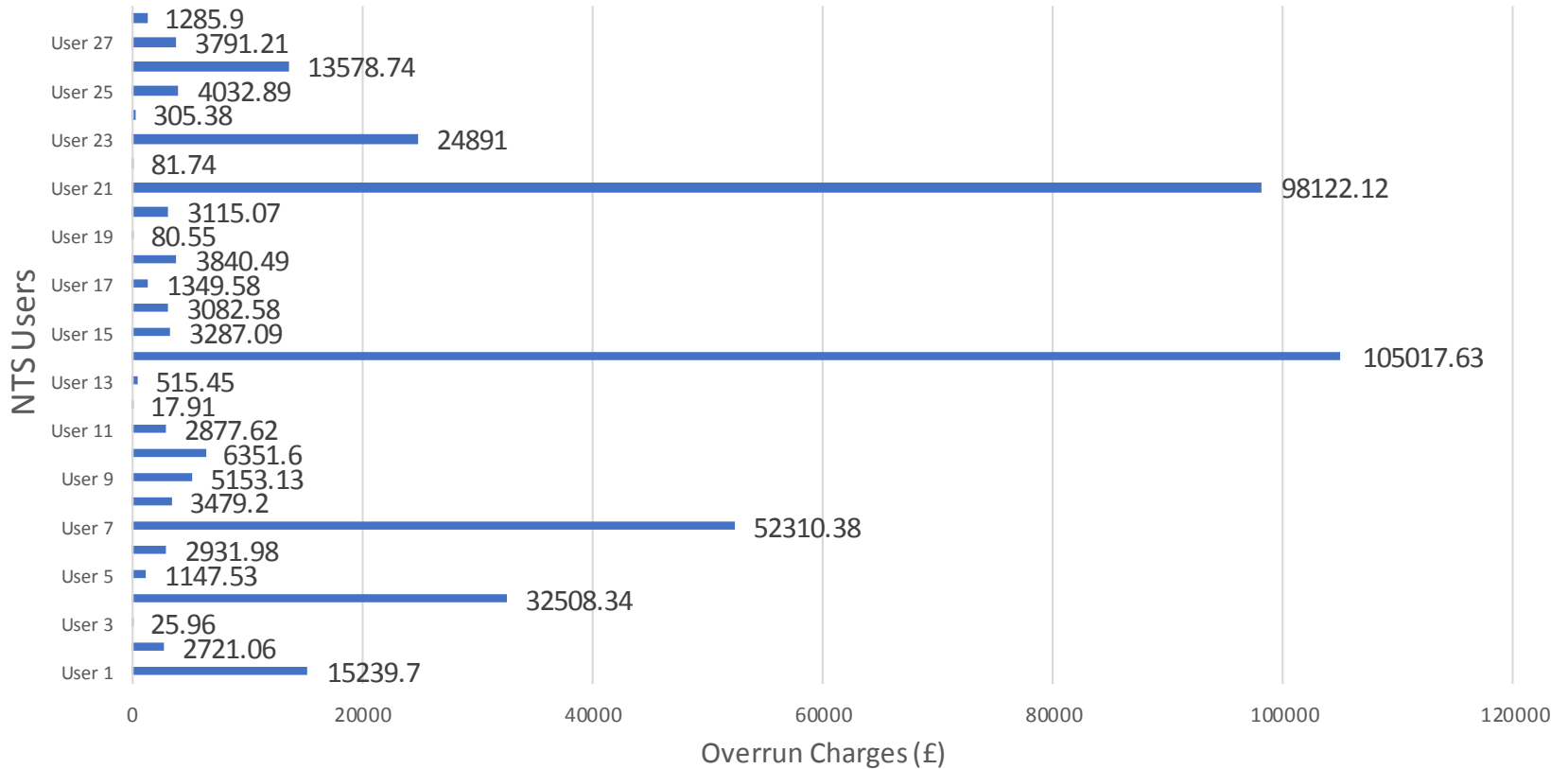
Entry Overruns – Year 2018/19

No of overruns	Overrun Quantity (kWh)	Overrun charge (£)
With capacity booking 403	152,429,603.00	154,032.76
Without capacity booking 616	198,294,277.00	237,109.53
1,019	350,723,880.00	391,142.29

Overrun – Entry Data - Year 2018/19

No of overruns	% Overrun over Capacity booked	Overrun Quantity(kWh)	Overrun charge (£)	Users incurring charges
317	0-2.99%	39,457,135	49,571.74	77 x User 1 57 x User 2 50 x User 3 33 x User 4 31 x User 5 15 x User 6 14 x User 7 (+ less than 10 – 15 Users)
41	3-9.99%	21,606,220	21,129.03	10 x User 1 6 x User 2 5 x User 3 (+ less than 5 – 10 Users)
16	10-20.99%	10,993,136	11,115.01	4 x User 1 3 x User 2 3 x User 3 (+ less than 3 – 5 Users)
15	21-39.99%	27,664,317	27,910.37	8 x User1 3 x User2 1 x User3 1 x User4 1 x User5
14	40%+	52,708,795	44,306.61	7 x User 1 5 x User 2 1 x User 3 1 x User 4

18/19 Overruns - Sum of Entry Overrun Charges per User Total for the Year = £391K



**No of Overruns per User: £105,017(65), £98,122(26), £52,310(48),
£32,508(35), £24,891(90)**

Top Overrunning Users

Entry Overruns – out of top 5:

- 4 Users are shippers
 - 3 Users are large international companies
- 1 User is a direct connect

Vary in size by measure of throughput (input)

- <50,000GWh/year - 3
- 50,000-100,000GWh/year – 1
- >100,000GWh/year – 1

Supply from beach/Norway as well as LNG, interconnector & NBP.

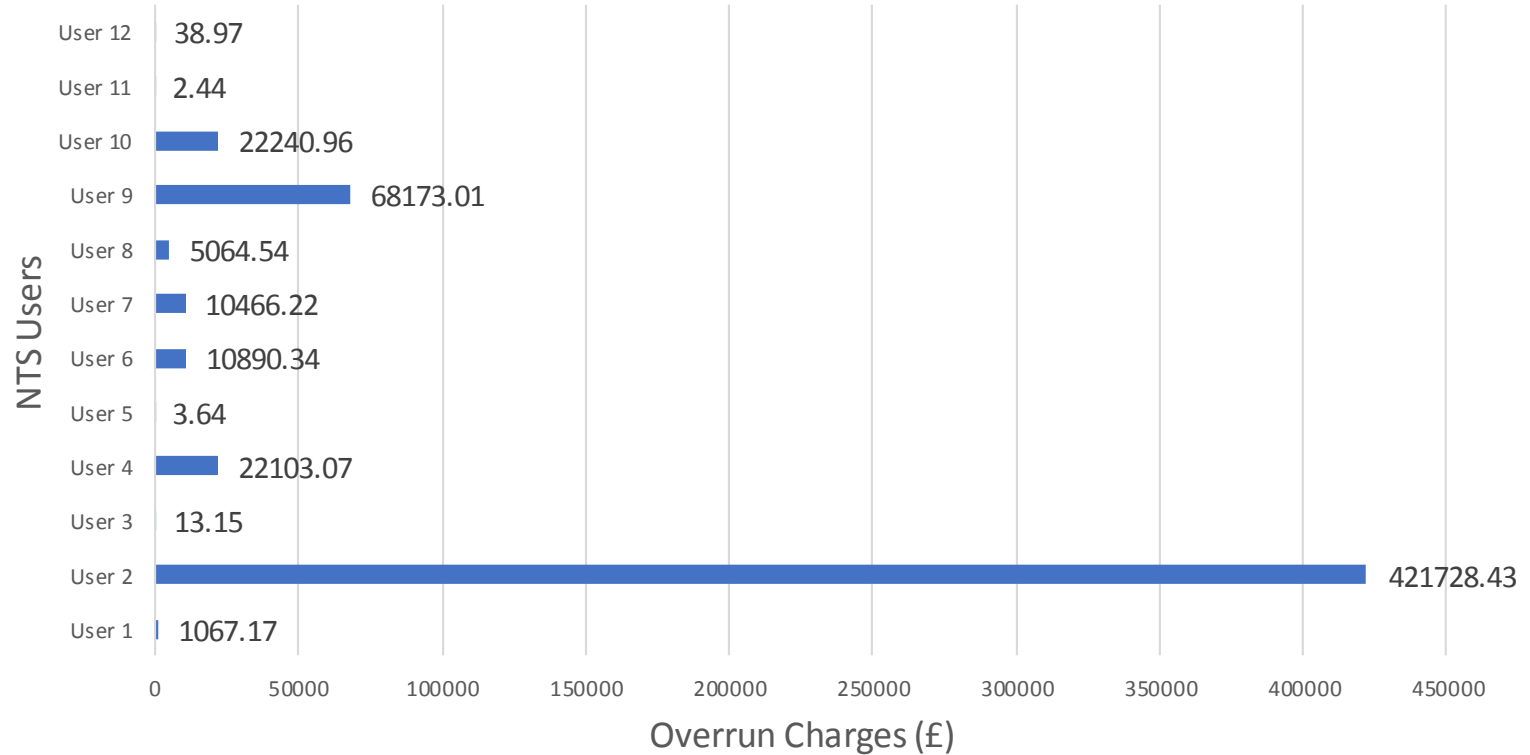
Exit Overruns – top 5 - mix of DNs and gas shippers

Overrun – Exit Data - Year 2018/19

No of overruns	Overrun charge (£)	Overrun Quantity(kWh)	Sum Overrun charge (£)	Users incurring charges
14	£0.01-£100	6,692,870	£139.27	4 x User 1 4 x User 2 3 x User 3 2 x User 4 1 x User 5
6	£101-£1000	2,372,776	£2,552.63	2 x User 1 2 x User 2 2 x User 3
17	£1,001-10,000	341,200,787	£70,423.43	7 x User 1 5 x User 2 2 x User 3 2 x User 4 1 x User 5
22	10,001-20,000	271,064,198	£337,501.55	20 x User 1 2 x User 2
7	£20,001+	88,591,794	£151,175.06	5 x User 1 1 x User 2 1 x User 3
Total: 66		709,922,425.00	£561,791.94	

18/19 Overruns - Sum of Exit Overrun Charges Incurred per User

Total for the Year = £561K



No of Overruns per User: £421,728(26), £68,173(9), £22,103(1), £22,240(1)

Overrun Charges – comparison

Entry Overruns – multiplier of 3 is closest to maintaining status quo based on Actual charges (excluding TO Commodity)

Multiplier	Actual charges Year 17/18	Actual charges Year 17/18 (including TO=£1,127.131 charges)	Charges 17/18 updated with Reserved Prices for Daily Standard Capacity (Postage Stamp)
x8	2,299,116.00	3,426,247.39	7,298,673.19
x6	1,725,198.20	2,852,329.47	5,474,004.90
x4	1,150,132.13	2,277,263.40	3,649,336.60
x3	862,599.00	1,989,730.37	2,737,002.45
x2	575,066.07	1,702,197.33	1,824,668.30

Multiplier	Actual charges Year 18/19	Actual charges Year 18/19 (including TO=£152,564.88 charges)	Charges 18/19 updated with Reserved Prices for Daily Standard Capacity (Postage Stamp)
x8	391,142.29	543,707.16	1,138,852.40
x6	293,356.99	445,921.87	854,139.30
x4	195,571.33	348,136.21	562,426.20
x3	166,606.36	319,171.24	427,069.65
x2	97,785.66	250,350.54	284,713.10

Overrun Charges – comparison

Exit Overruns - multiplier of 6 is closest to maintaining status quo based on Actual charges (excluding TO Commodity)

Multiplier	Actual charges Year 17/18	Actual charges Year 17/18 (including TO exit commodity charges)	Charges 17/18 updated with Reserved Prices for Daily Standard Capacity (Postage Stamp)
x8	675,682.12	853,307.96	918,636.87
x6	506,761.59	684,387.42	688,977.66
x5	422,301.32	599,927.16	574,148.05
x4	269,084.25	446,710.08	459,318.44
x2	134,542.12	312,167.96	229,659.22

Multiplier	Actual charges Year 18/19	Actual charges Year 18/19 (including TO exit commodity charges)	Charges 18/19 updated with Reserved Prices for Daily Standard Capacity (Postage Stamp)
x8	561,791.94	715,845.11	863,265.67
x6	421,343.97	575,397.13	647,449.25
x5	351,119.97	505,173.14	539,541.04
x4	280,895.98	434,949.14	431,632.83
x2	140,447.99	294,501.15	215,816.42

Overrun Charges – comparison

	Revenue from Overrun charges (£)	Revenue updated with PS charges (£)	Potential revenue increase	Multiplier 8/ potential revenue increase	New multiplier average
Entry 2018/19	391,142.29	1,138,852.40	1,138,852.40/ 391,142.29=2.91	8/2.91=2.75	2.63
Entry 2017/18	2,299,116.00	7,298,673.19	7,298,673.19/ 2,299,116=3.17	8/3.17=2.52	
Exit 2018/19	561,792	863,265.67	863,265.67/ 561,792= 1.54	8/1.54=5.21	5.55
Exit 2017/18	675,682	918,636.87	918,636.87/675,682 =1.36	8/1.36=5.88	

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