

## Background

In response to UNC Workgroup 0517, Review of the Supply Matching Merit Order in Setting Capacity Charges on Monday 15 December 2014, Wales and West Utilities (WWU) have modelled the impact on a typical customer within each of the following bands:

1. 'Domestic' <73,200kWh
2. 73,200kWh <'Small Inc' <732,000kWh
3. 732,000kWh <'Large'

within both the WA2 (Wales South), and SW1 Exit Zones. Additionally, within the Large band, figures have been calculated for all exit zones, namely the addition of WA1 (Wales North); SW2 and SW3.

The following consistent assumptions have been applied to the model:

1. Exit Capacity Prices used for Mod 0517/0517A are those published within the Agenda of the UNC Work Group 8<sup>th</sup> December 2015, 'Exit - October 2015 Indicative Values': Option 3.
2. No increase has been applied to the above exit capacity prices over the period to 2020/21.
3. Exit Capacity prices used for 'Current Prices' are:
  - (i) Gas Year commencing 1<sup>st</sup> Oct 2015: Published by NTS on 14<sup>th</sup> Nov 2014
  - (ii) Gas Years commencing 1<sup>st</sup> Oct 2016 and 1<sup>st</sup> Oct 2017: Published by NTS on 1<sup>st</sup> May 2014.
  - (iii) Gas Years commencing 1<sup>st</sup> Oct 2018, 1<sup>st</sup> Oct 2019 and 1<sup>st</sup> Oct 2020: Assumed 4% increase year on year.
4. No increase has been applied to these exit capacity prices over the period to 2020/21
5. Adjustments have been made to account for leap years in 2015/2016 and 2019/2020.
6. A year is based on the regulatory year, i.e. from 1<sup>st</sup> April XX to 31<sup>st</sup> March XY
7. All prices are at nominal prices
8. Assumes the following price adjustments excluding exit capacity income aligned to the regulatory year:
  - a. 2015/16 – baseline
  - b. 2016/17 – +8.2%
  - c. 2017/18 – +8.9%
  - d. 2018/19 – +3.9%
  - e. 2019/20 – +3.9%
  - f. 2020/21 – +3.8%

## Customer in <73,200kWh band

The following examples relate to an indicative bill for a typical domestic customer, within the region of WA2 (table 1), and additionally SW1 (table 2). The bill has been calculated on the following assumptions:

	South Wales	South West
<b>LDZ</b>	WA2	SW1
<b>AQ</b>	14,000	14,000
<b>Load Factor</b>	31.8%	29.90%
<b>SOQ*</b>	121	128

\* Assumes SOQ will reduce by 2.7% in 2015/16 and 2% per annum thereafter based on historic trends.

**Table 1 - Impact on total bill for a Domestic customer based in WA2**

	Current Prices	MOD0517	MOD0517 with Allowance adjustment in T+2	MOD0517a (with allowance adjustment in T+2)	Increase from current prices for MOD0517	Increase from current prices for MOD0517 (with allowance)	Increase from current prices for MOD0517 A (with allowance)
<b>Domestic</b>							
2015/16	£131.75	£132.89	£132.89	£131.75	0.87%	0.87%	0.00%
2016/17	£142.52	£144.11	£144.11	£142.52	1.11%	1.11%	0.00%
2017/18	£155.69	£157.72	£158.24	£156.53	1.30%	1.64%	0.54%
2018/19	£161.84	£164.34	£164.74	£162.94	1.55%	1.80%	0.68%
2019/20	£168.87	£171.03	£170.41	£169.80	1.28%	0.91%	0.55%
2020/21	£174.77	£176.92	£176.44	£175.78	1.23%	0.96%	0.58%

**Table 2 - Impact on total bill for a Domestic customer based in SW1**

	Current Prices	MOD0517	MOD0517 with Allowance adjustment in T+2	MOD0517a (with allowance adjustment in T+2)	Increase from current prices for MOD0517	Increase from current prices for MOD0517 (with allowance)	Increase from current prices for MOD0517 A (with allowance)
<b>Domestic</b>							
2015/16	£142.16	£142.63	£142.63	£142.16	0.33%	0.33%	0.00%
2016/17	£153.69	£154.39	£154.39	£153.69	0.46%	0.46%	0.00%
2017/18	£167.53	£169.45	£170.34	£168.19	1.15%	1.68%	0.39%
2018/19	£174.33	£176.86	£177.56	£175.27	1.45%	1.85%	0.54%
2019/20	£182.37	£184.06	£183.03	£182.80	0.93%	0.36%	0.23%
2020/21	£188.77	£190.40	£189.56	£189.28	0.87%	0.42%	0.27%

### Customer in 73,200kWh<Small I&C<732,000kWh band

The following examples relate to an indicative bill for a small incorporated customer, within the region of WA2 (table 3), and additionally SW1 (table 4). The bill has been calculated on the following assumptions:

	S.Wales	South West
<b>LDZ</b>	WA2	SW1
<b>AQ</b>	196,490	196,490
<b>Load Factor</b>	N/A	N/A
<b>SOQ*</b>	1,755	1,755

\* Assumes SOQ will reduce by 2.7% in 2015/16 and 2% per annum thereafter based on historic trends.

**Table 3 - Impact on total bill for a Small Inc customer based in WA2**

	Current Prices	MOD0517	MOD0517 with Allowance adjustment in T+2	MOD0517a (with allowance adjustment in T+2)	Increase from current prices for MOD0517	Increase from current prices for MOD0517 (with allowance)	Increase from current prices for MOD0517 A (with allowance)	
Small Inc	2015/16	£1,251.15	£1,267.85	£1,267.85	£1,251.15	1.33%	1.33%	0.00%
	2016/17	£1,263.32	£1,378.34	£1,378.34	£1,355.28	9.10%	9.10%	7.28%
	2017/18	£1,283.02	£1,512.44	£1,520.12	£1,495.14	17.88%	18.48%	16.53%
	2018/19	£1,290.37	£1,578.37	£1,584.13	£1,557.87	22.32%	22.77%	20.73%
	2019/20	£1,304.56	£1,641.75	£1,632.76	£1,623.76	25.85%	25.16%	24.47%
	2020/21	£1,307.48	£1,697.79	£1,690.74	£1,681.13	29.85%	29.31%	28.58%

**Table 4 - Impact on total bill for a Small Inc customer based in SW1**

	Current Prices	MOD0517	MOD0517 with Allowance adjustment in T+2	MOD0517a (with allowance adjustment in T+2)	Increase from current prices for MOD0517	Increase from current prices for MOD0517 (with allowance)	Increase from current prices for MOD0517 A (with allowance)	
Small Inc	2015/16	£1,282.63	£1,289.05	£1,289.05	£1,282.63	0.50%	0.50%	0.00%
	2016/17	£1,295.99	£1,397.55	£1,397.55	£1,387.95	7.84%	7.84%	7.10%
	2017/18	£1,313.77	£1,539.98	£1,552.15	£1,522.69	17.22%	18.15%	15.90%
	2018/19	£1,324.96	£1,611.04	£1,620.64	£1,589.26	21.59%	22.32%	19.95%
	2019/20	£1,346.95	£1,675.79	£1,661.66	£1,658.45	24.41%	23.36%	23.13%
	2020/21	£1,351.68	£1,733.02	£1,721.49	£1,717.64	28.21%	27.36%	27.07%

## Customer in 732,000kWh<'Large' band

The following examples relate to an indicative bill for a Large customer, within each WWU LDZ. The bill has been calculated on the following assumptions:

	North Wales	South Wales	South West		
LDZ	WA1	WA2	SW1	SW2	SW3
AQ	3,000,000,000	3,000,000,000	3,000,000,000	3,000,000,000	3,000,000,000
Load Factor	N/A	N/A	N/A	N/A	N/A
SOQ**	14,000,000	14,000,000	14,000,000	14,000,000	14,000,000

\*\* Assumes no reduction in SOQ over the period based on historic trends

Table 5 - Impact on total bill for a Large WA1 customer based in WA1

	Current Prices	MOD0517	MOD0517 with Allowance adjustment in T+2	MOD0517a (with allowance adjustment in T+2)	Increase from current prices for MOD0517	Increase from current prices for MOD0517 (with allowance)	Increase from current prices for MOD0517 A (with allowance)	
Large WA1	2015/16	2,617,340.02	2,326,070.02	2,326,070.02	2,617,340.02	-11.13%	-11.13%	0.00%
	2016/17	2,883,950.03	2,383,170.03	2,383,170.03	2,883,950.03	-17.36%	-17.36%	0.00%
	2017/18	3,005,370.03	2,862,290.03	3,030,920.03	2,862,290.03	-4.76%	0.85%	-4.76%
	2018/19	3,215,770.03	3,128,900.03	3,266,870.03	3,113,570.03	-2.70%	1.59%	-3.18%
	2019/20	3,602,020.03	3,213,660.03	3,009,260.03	3,280,090.03	-10.78%	-16.46%	-8.94%
	2020/21	3,725,550.03	3,306,530.03	3,137,900.03	3,424,060.03	-11.25%	-15.77%	-8.09%

Table 6 - Impact on total bill for a Large WA2 customer based in WA2

	Current Prices	MOD0517	MOD0517 with Allowance adjustment in T+2	MOD0517a (with allowance adjustment in T+2)	Increase from current prices for MOD0517	Increase from current prices for MOD0517 (with allowance)	Increase from current prices for MOD0517 A (with allowance)	
Large WA2	2015/16	1,503,360.02	1,636,220.02	1,636,220.02	1,503,360.02	8.84%	8.84%	0.00%
	2016/17	1,662,660.03	1,846,620.03	1,846,620.03	1,662,660.03	11.06%	11.06%	0.00%
	2017/18	1,870,950.03	2,106,010.03	2,167,330.03	1,968,040.03	12.56%	15.84%	5.19%
	2018/19	1,953,600.03	2,244,870.03	2,290,860.03	2,081,350.03	14.91%	17.26%	6.54%
	2019/20	2,058,800.03	2,309,190.03	2,237,650.03	2,166,110.03	12.16%	8.69%	5.21%
	2020/21	2,136,340.03	2,386,730.03	2,330,520.03	2,253,870.03	11.72%	9.09%	5.50%

**Table 7 - Impact on total bill for a Large SW1 customer based in SW1**

	Current Prices	MOD0517	MOD0517 with Allowance adjustment in T+2	MOD0517a (with allowance adjustment in T+2)	Increase from current prices for MOD0517	Increase from current prices for MOD0517 (with allowance)	Increase from current prices for MOD0517 A (with allowance)
Large SW1 2015/16	1,753,750.02	1,804,850.02	1,804,850.02	1,753,750.02	2.91%	2.91%	0.00%
2016/17	1,923,270.03	1,999,920.03	1,999,920.03	1,923,270.03	3.99%	3.99%	0.00%
2017/18	2,116,230.03	2,325,740.03	2,422,830.03	2,187,770.03	9.90%	14.49%	3.38%
2018/19	2,229,540.03	2,505,480.03	2,582,130.03	2,331,740.03	12.38%	15.81%	4.58%
2019/20	2,396,060.03	2,580,020.03	2,467,600.03	2,442,050.03	7.68%	2.99%	1.92%
2020/21	2,488,930.03	2,667,780.03	2,575,800.03	2,545,140.03	7.19%	3.49%	2.26%

**Table 8 - Impact on total bill for a Large SW2 customer based in SW2**

	Current Prices	MOD0517	MOD0517 with Allowance adjustment in T+2	MOD0517a (with allowance adjustment in T+2)	Increase from current prices for MOD0517	Increase from current prices for MOD0517 (with allowance)	Increase from current prices for MOD0517 A (with allowance)
Large SW2 2015/16	2,423,160.02	2,392,500.02	2,392,500.02	2,423,160.02	-1.27%	-1.27%	0.00%
2016/17	2,679,550.03	2,648,890.03	2,648,890.03	2,679,550.03	-1.14%	-1.14%	0.00%
2017/18	2,846,960.03	3,240,430.03	3,465,270.03	2,954,270.03	13.82%	21.72%	3.77%
2018/19	3,042,030.03	3,573,470.03	3,762,540.03	3,220,880.03	17.47%	23.69%	5.88%
2019/20	3,387,400.03	3,663,340.03	3,392,510.03	3,392,510.03	8.15%	0.15%	0.15%
2020/21	3,505,820.03	3,766,430.03	3,546,700.03	3,546,700.03	7.43%	1.17%	1.17%

**Table 9 - Impact on total bill for a Large SW3 customer based in SW3**

	Current Prices	MOD0517	MOD0517 with Allowance adjustment in T+2	MOD0517a (with allowance adjustment in T+2)	Increase from current prices for MOD0517	Increase from current prices for MOD0517 (with allowance)	Increase from current prices for MOD0517 A (with allowance)
Large SW3 2015/16	2,556,020.02	2,428,270.02	2,428,270.02	2,556,020.02	-5.00%	-5.00%	0.00%
2016/17	2,812,410.03	2,648,890.03	2,648,890.03	2,812,410.03	-5.81%	-5.81%	0.00%
2017/18	2,923,610.03	3,235,320.03	3,460,160.03	2,984,930.03	10.66%	18.35%	2.10%
2018/19	3,123,790.03	3,568,360.03	3,752,320.03	3,256,650.03	14.23%	20.12%	4.25%
2019/20	3,489,600.03	3,658,230.03	3,387,400.03	3,433,390.03	4.83%	-2.93%	-1.61%
2020/21	3,613,130.03	3,761,320.03	3,541,590.03	3,587,580.03	4.10%	-1.98%	-0.71%

To demonstrate the direct impact MOD0517 has on the exit capacity element of a customer bill, i.e. without any offset in price increases in other elements of customer bill, the exit capacity only has been considered for a 730,000kWh<'Large' band:

**Table 10 - Impact on EXIT CAPACITY element of bill for a Large WA1 customer based in WA1**

	Current Prices	MOD0517	MOD0517 with Allowance adjustment in T+2	MOD0517a (with allowance adjustment in T+2)	Increase from current prices for MOD0517	Increase from current prices for MOD0517 (with allowance)	Increase from current prices for MOD0517 A (with allowance)
Large WA1 2015/16	1,180,410.00	889,140.00	889,140.00	1,180,410.00	-24.68%	-24.68%	0.00%
2016/17	1,333,710.00	832,930.00	832,930.00	1,333,710.00	-37.55%	-37.55%	0.00%
2017/18	1,313,270.00	1,170,190.00	1,338,820.00	1,170,190.00	-10.89%	1.95%	-10.89%
2018/19	1,456,350.00	1,369,480.00	1,507,450.00	1,354,150.00	-5.96%	3.51%	-7.02%
2019/20	1,778,280.00	1,389,920.00	1,185,520.00	1,456,350.00	-21.84%	-33.33%	-18.10%
2020/21	1,829,380.00	1,410,360.00	1,241,730.00	1,527,890.00	-22.91%	-32.12%	-16.48%

**Table 11 - Impact on EXIT CAPACITY element of bill for a Large WA2 customer based in WA2**

	Current Prices	MOD0517	MOD0517 with Allowance adjustment in T+2	MOD0517a (with allowance adjustment in T+2)	Increase from current prices for MOD0517	Increase from current prices for MOD0517 (with allowance)	Increase from current prices for MOD0517 A (with allowance)
Large WA2 2015/16	66,430.00	199,290.00	199,290.00	66,430.00	200.00%	200.00%	0.00%
2016/17	112,420.00	296,380.00	296,380.00	112,420.00	163.64%	163.64%	0.00%
2017/18	178,850.00	413,910.00	475,230.00	275,940.00	131.43%	165.71%	54.29%
2018/19	194,180.00	485,450.00	531,440.00	321,930.00	150.00%	173.68%	65.79%
2019/20	235,060.00	485,450.00	413,910.00	342,370.00	106.52%	76.09%	45.65%
2020/21	240,170.00	490,560.00	434,350.00	357,700.00	104.26%	80.85%	48.94%

**Table 12 - Impact on EXIT CAPACITY element of bill for a Large SW1 customer based in SW1**

	Current Prices	MOD0517	MOD0517 with Allowance adjustment in T+2	MOD0517a (with allowance adjustment in T+2)	Increase from current prices for MOD0517	Increase from current prices for MOD0517 (with allowance)	Increase from current prices for MOD0517 A (with allowance)
Large SW1 2015/16	316,820.00	367,920.00	367,920.00	316,820.00	16.13%	16.13%	0.00%
2016/17	373,030.00	449,680.00	449,680.00	373,030.00	20.55%	20.55%	0.00%
2017/18	424,130.00	633,640.00	730,730.00	495,670.00	49.40%	72.29%	16.87%
2018/19	470,120.00	746,060.00	822,710.00	572,320.00	58.70%	75.00%	21.74%
2019/20	572,320.00	756,280.00	643,860.00	618,310.00	32.14%	12.50%	8.04%
2020/21	592,760.00	771,610.00	679,630.00	648,970.00	30.17%	14.66%	9.48%

**Table 13 - Impact on EXIT CAPACITY element of bill for a Large SW2 customer based in SW2**

	Current Prices	MOD0517	MOD0517 with Allowance adjustment in T+2	MOD0517a (with allowance adjustment in T+2)	Increase from current prices for MOD0517	Increase from current prices for MOD0517 (with allowance)	Increase from current prices for MOD0517 A (with allowance)	
Large SW2	2015/16	986,230.00	955,570.00	955,570.00	986,230.00	-3.11%	-3.11%	0.00%
	2016/17	1,129,310.00	1,098,650.00	1,098,650.00	1,129,310.00	-2.71%	-2.71%	0.00%
	2017/18	1,154,860.00	1,548,330.00	1,773,170.00	1,262,170.00	34.07%	53.54%	9.29%
	2018/19	1,282,610.00	1,814,050.00	2,003,120.00	1,461,460.00	41.43%	56.18%	13.94%
	2019/20	1,563,660.00	1,839,600.00	1,568,770.00	1,568,770.00	17.65%	0.33%	0.33%
	2020/21	1,609,650.00	1,870,260.00	1,650,530.00	1,650,530.00	16.19%	2.54%	2.54%

**Table 14 - Impact on EXIT CAPACITY element of bill for a Large SW3 customer based in SW3**

	Current Prices	MOD0517	MOD0517 with Allowance adjustment in T+2	MOD0517a (with allowance adjustment in T+2)	Increase from current prices for MOD0517	Increase from current prices for MOD0517 (with allowance)	Increase from current prices for MOD0517 A (with allowance)	
Large SW3	2015/16	1,119,090.00	991,340.00	991,340.00	1,119,090.00	-11.42%	-11.42%	0.00%
	2016/17	1,262,170.00	1,098,650.00	1,098,650.00	1,262,170.00	-12.96%	-12.96%	0.00%
	2017/18	1,231,510.00	1,543,220.00	1,768,060.00	1,292,830.00	25.31%	43.57%	4.98%
	2018/19	1,364,370.00	1,808,940.00	1,992,900.00	1,497,230.00	32.58%	46.07%	9.74%
	2019/20	1,665,860.00	1,834,490.00	1,563,660.00	1,609,650.00	10.12%	-6.13%	-3.37%
	2020/21	1,716,960.00	1,865,150.00	1,645,420.00	1,691,410.00	8.63%	-4.17%	-1.49%