# **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'<73,000kWh
- 2. 73,000kWh <'Small Inc'<730,000kWh
- 3. 730,000kWh <'Large'

within both the WA2 (Wales South), and SW1 Exit Zones.

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 Yr commencing 1<sup>st</sup> Oct 2015: Published by NTS on 14<sup>th</sup> Nov 2014
  - Gas Yrs 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 Yrs 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 <17,300kWh 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:

	S.Wales	South West
LDZ	WA2	SW1
AQ	14,000	14,000
Load Factor	31.8%	29.90%
SOQ*	121	128

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

		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)
	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%
Domestic	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 1 - Impact on total bill for a Domestic customer based in WA2

### 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)
	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%
Domestic	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 17,300kWh<'Small Inc'<730,000kWh 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		
LDZ	WA2	SW1		
AQ	196,490	196,490		
Load Factor	N/A	N/A		
SOQ*	1,755	1,755		

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

		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)
	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%
Small Inc	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)
	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%
Small Inc	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 730,000kWh<'Large' band

The following examples relate to an indicative bill for a Large customer, within the region of WA2 (table 5), and additionally SW1 (table 6). The bill has been calculated on the following assumptions:

	S.Wales	South West
LDZ	WA2	SW1
AQ	3,000,000,000	3,000,000,000
Load Factor	N/A	N/A
SOQ**	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 #1 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)
	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%
Large #1	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 6 - Impact on total bill for a Large #2 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)
	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%
Large #2	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%

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 capcity only has been considered for a **730,000kWh<'Large' band**:

		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)
	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%
Large #1	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 7 - Impact on EXIT CAPACITY element of bill for a Large #1 customer based in WA2

Table 8 – Impact on EXIT CAPACITY element of bill for a large #2 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)
	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%
Large #2	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%