

Michael Scott  
Firmus Energy  
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Kilbegs Business Park  
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23 May 2007

Dear Michael,

**Re: Firmus Price Control Determination Values.**

In accordance with Condition 4.4.5 (e) of the firmus energy (Distribution) Limited licence, I am now in a position to outline the Determination Values to apply for the First Periodic Review (Annex 1).

Since your initial submission in October 2005 both firmus and NIAUR staff have been engaged in a process along with PB Power to verify and critically assess the projected capital and operational expenditure required by firmus as well as the projected connections and volumes to be achieved over the duration of the 30 year business plan.

It is important to note that whilst the allowed revenue is set initially for 3 years until 31<sup>st</sup> December 2008, the second periodic review for firmus energy is due to begin at the end of this year and a significant amount of work will have to be carried out by both firmus and NIAUR to ensure that the problems encountered during this review e.g. difficulty with financial models do not frustrate the process again.

To this end, I am proposing that NIAUR staff work with firmus energy during the course of this year to outline specifically what information and supporting documentation will be required in order to ensure a timely conclusion to the analysis next time.

I will now take each of the main sections of firmus energy's submission in turn and outline our assessment on the efficient parameters<sup>1</sup> (detailed in annex 1 - 5) to be determined on for the purposes of the first review.

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<sup>1</sup> June 2006 Prices

## **Volumes & Connections**

It is our understanding that the priority of firmus energy will be to connect the large IC customers in each of the 10 towns with domestic customers located adjacent to a mains pipe being offered a chance of connection.

Connections will only be made where it is economic to do so and for P1 connections the main focus over the next number of years will be NIHE and new build connections.

The connection numbers and assumptions laid out in Annex 2 are the basis upon which the volumes have been forecast and it is that these assumptions and drivers that will be closely scrutinized at the time of the next review in order to explain any variance that may have occurred.

It is noted that the volumes forecast by firmus energy were updated in a June submission in order to take account of lower than anticipated IC connections, domestic (mainly NIHE) connections as well as lower than originally forecast average burn estimates due to the experience of downturn in average consumption.

## **Capital Expenditure**

The capex forecasts as outlined in annex 3 are based upon a network build programme that will seek to maximize load capture at an early date.

Unit rates in the firmus submission are based on agreed tender rates resulting from the Project and Period contracts awarded to McNicholas through a competitive tendering exercise. Firmus outlined the process it undertook when carrying out the tendering exercise and NIAUR is satisfied that a fair and competitive result was achieved.

Consequently, for the purposes of the first periodic review the unit rates and network build requirements have been accepted by NIAUR. However at the time of the next review it is expected that both firmus and McNicholas will have acquired a significant amount of knowledge about how best to design and engineer the networks in each of the towns, and it would be expected that an efficiency factor could be applied going forward to take account of this increased expertise.

Indeed a full variance analysis of each cost line will be carried out at the next review and an explanation will be sought for any difference that has been recorded between forecast and actual. It is therefore expected that firmus will be in a position to give a full explanation of any cost differential that may occur and the likely implications of this for the next review.

## **Operational Expenditure**

It is noted that firmus energy have adopted the philosophy of outsourcing most of its operating activities to third party providers and/or to parent company in order to leverage off existing economies of scale to establish an efficient operating cost base.

At the time of the next review an assessment of the success of this approach will be carried out by NIAUR and full details of all service level agreements as well as cost outturn will be required. Indeed where applicable NIAUR may liaise with CER in order to verify costs incurred.

All assumptions detailed in Annex 4 will be scrutinized for efficiency and it is anticipated that the cost apportionment will be revisited at the next review in order to ensure propriety in the allocation of costs between supply and distribution. Indeed a rigorous assessment of costs relating to both supply and distribution will be carried out at the next review due to the financial framework under which firmus distribution/supply currently operate.

### **Opening Asset Value**

The total opening asset value amounts to £4,318,224. This can be broken down as follows:

	31-Dec-05
Opening Asset Value	
Capex	£1,801,928
Opex	£2,016,296
pre grant opex	£500,000
	<u>£4,318,224</u>

Yours Sincerely

Iain Osborne  
Chief Executive

## Annex 1 – Determination Values Pi's

		Pi's	£/therm
Domestic	< 2,500	P1	£0.2247
Small IC	2,500 - 25,000	P2	£0.1972
Medium IC	25,000 - 75,000	P3	£0.1901
Large Firm	> 75,000	P4	£0.1800
Large CHP	> 75,000 CHP	P5	£0.1800
Interruptible	Interruptible	P6	£0.1620

## Annex 2 – Volumes & Connections

Based on the forecast connection explained below total annual domestic volumes forecast for firmus energy for the period 31<sup>st</sup> December 2005 to 31<sup>st</sup> December 2035 is as follows:

		2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Domestic	P1	64,221	558,617	1,506,329	2,565,198	3,627,011	4,741,276	5,767,179	6,826,028	7,881,577	8,932,627
Small	P2	0	2,596	20,579	69,410	199,418	590,507	1,013,027	1,420,111	1,855,398	2,249,496
Medium IC	P3	0	196,639	522,544	1,016,174	1,597,747	2,529,046	3,263,029	3,763,915	4,225,399	4,510,309
Large Firm	P4	1,163,837	4,264,513	7,745,837	8,448,018	10,201,988	11,383,461	11,758,276	11,758,276	11,758,276	11,758,276
Large Firm CHP	P5	0	0	30,698	90,288	90,288	266,276	375,288	375,288	375,288	375,288
Interruptible	P6	4,770,961	9,073,301	14,530,386	16,043,475	17,664,819	21,026,960	23,701,838	23,701,838	23,701,838	23,701,838
<b>Total Volumes</b>		<b>5,999,019</b>	<b>14,095,667</b>	<b>24,356,374</b>	<b>28,232,563</b>	<b>33,381,271</b>	<b>40,537,526</b>	<b>45,878,636</b>	<b>47,845,455</b>	<b>49,797,776</b>	<b>51,527,833</b>

  

		2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Domestic	P1	10,425,559	11,432,459	12,379,822	13,308,622	14,237,422	15,166,222	16,095,022	17,023,822	17,952,622	18,881,422
Small IC	P2	2,595,155	2,724,885	2,787,806	2,827,610	2,852,407	2,866,065	2,872,487	2,882,228	2,888,650	2,893,414
Medium IC	P3	4,711,438	4,771,365	4,831,292	4,891,219	4,951,146	5,011,073	5,071,000	5,130,927	5,145,909	5,145,909
Large Firm	P4	11,758,276	11,758,276	11,758,276	11,758,276	11,758,276	11,758,276	11,758,276	11,758,276	11,758,276	11,758,276
Large Firm CHP	P5	375,288	375,288	375,288	375,288	375,288	375,288	375,288	375,288	375,288	375,288
Interruptible	P6	23,701,838	23,701,838	23,701,838	23,701,838	23,701,838	23,701,838	23,701,838	23,701,838	23,701,838	23,701,838
<b>Total Volumes</b>		<b>53,567,554</b>	<b>54,764,111</b>	<b>55,834,322</b>	<b>56,862,852</b>	<b>57,876,376</b>	<b>58,878,761</b>	<b>59,873,911</b>	<b>60,872,378</b>	<b>61,822,583</b>	<b>62,756,146</b>

  

		2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Domestic	P1	19,810,222	20,739,022	21,667,822	22,596,622	23,525,422	24,454,222	25,383,022	26,311,822	27,240,622	28,169,422
Small IC	P2	2,898,177	2,899,368	2,899,368	2,899,368	2,899,368	2,899,368	2,899,368	2,899,368	2,899,368	2,899,368
Medium IC	P3	5,145,909	5,145,909	5,145,909	5,145,909	5,145,909	5,145,909	5,145,909	5,145,909	5,145,909	5,145,909
Large Firm	P4	11,758,276	11,758,276	11,758,276	11,758,276	11,758,276	11,758,276	11,758,276	11,758,276	11,758,276	11,758,276
Large Firm CHP	P5	375,288	375,288	375,288	375,288	375,288	375,288	375,288	375,288	375,288	375,288
Interruptible	P6	23,701,838	23,701,838	23,701,838	23,701,838	23,701,838	23,701,838	23,701,838	23,701,838	23,701,838	23,701,838
<b>Total Volumes</b>		<b>63,689,710</b>	<b>64,619,701</b>	<b>65,548,501</b>	<b>66,477,301</b>	<b>67,406,101</b>	<b>68,334,901</b>	<b>69,263,701</b>	<b>70,192,501</b>	<b>71,121,301</b>	<b>72,050,101</b>

These volumes are based on the following forecast connections and additional assumptions

<b>Connections</b>		<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>
Domestic	P1	1,082	2,134	2,197	2,197	2,195	2,176	2,174	2,168	2,160	2,148
Small IC	P2	0	2	6	17	56	79	85	81	88	68
Medium IC	P3	1	5	7	8	14	13	10	8	6	3
Large Firm	P4	14	20	4	8	3	0	0	0	0	0
Large Firm CHP	P5	0	0	1	0	0	1	0	0	0	0
Interruptible	P6	9	11	3	3	6	0	0	0	0	0
Total Connections		1,106	2,172	2,218	2,233	2,274	2,269	2,269	2,257	2,254	2,219
Cumulative		1,107	3,279	5,497	7,729	10,003	12,272	14,541	16,798	19,052	21,271

<b>Connections</b>		<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>
Domestic	P1	2,098	2,070	1,935	1,935	1,935	1,935	1,935	1,935	1,935	1,935
Small IC	P2	35	23	10	8	4	2	1	2	1	1
Medium IC	P3	1	1	1	1	1	1	1	1	0	0
Large Firm	P4	0	0	0	0	0	0	0	0	0	0
Large Firm CHP	P5	0	0	0	0	0	0	0	0	0	0
Interruptible	P6	0	0	0	0	0	0	0	0	0	0
Total Connections		2,134	2,094	1,946	1,944	1,940	1,938	1,937	1,938	1,936	1,936
Cumulative		23,405	25,499	27,445	29,389	31,329	33,267	35,204	37,142	39,078	41,014

<b>Connections</b>		<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>	<b>2033</b>	<b>2034</b>	<b>2035</b>
Domestic	P1	1,935	1,935	1,935	1,935	1,935	1,935	1,935	1,935	1,935	1,935
Small IC	P2	1	0	0	0	0	0	0	0	0	0
Medium IC	P3	0	0	0	0	0	0	0	0	0	0
Large Firm	P4	0	0	0	0	0	0	0	0	0	0
Large Firm CHP	P5	0	0	0	0	0	0	0	0	0	0
Interruptible	P6	0	0	0	0	0	0	0	0	0	0
Total Connections		1,936	1,935	1,935	1,935	1,935	1,935	1,935	1,935	1,935	1,935
Cumulative		42,950	44,885	46,820	48,755	50,690	52,625	54,560	56,495	58,430	60,365

## Volume Assumptions

### Volumes Assumptions

**Efficiency factor** 5.00%

**Delay from Connection to Burn (Months)**

Sector	Months
Large IC	2
Small IC	3
Medium IC	3
New Build	7
NIHE	3
Existing	3

**Assumed Consumption**

EAC (Therms p.a.)

New Build	480
NIHE	450
Existing	550

### Annex 3 – Capital Expenditure

<b>Capex</b>											
Service heading	Asset type	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
MP	4 bar main	£7,970,870	£10,539,639	£7,888,048	£4,724,436	£5,356,633	£1,774,132	£1,513,140	£1,524,952	£1,549,023	£1,577,040
	Governors	£72,000	£216,000	£120,000	£168,000	£0	£0	£0	£0	£0	£0
LP		£58,958	£43,352	£0	£289,333	£347,586	£329,184	£172,170	£2,307	£0	£0
Domestic	Services	£284,632	£350,167	£350,248	£350,248	£349,454	£186,416	£185,984	£184,689	£182,961	£180,370
	Meters	£105,459	£177,040	£174,539	£174,539	£174,316	£150,318	£150,180	£149,765	£149,213	£148,384
IC	Services	£1,482	£8,417	£13,396	£20,422	£48,969	£59,079	£57,658	£52,679	£53,243	£38,718
	Meters	£2,959	£16,748	£26,567	£40,254	£96,042	£115,512	£112,484	£102,665	£103,572	£75,190
Large loads	Services	£55,599	£74,937	£19,339	£26,591	£21,756	£2,417	£0	£0	£0	£0
	Meters	£256,869	£346,215	£89,346	£122,850	£100,514	£11,168	£0	£0	£0	£0
Telemetry		£39,000	£60,000	£18,000	£27,000	£13,500	£0	£0	£0	£0	£0
Other capex	IT & office	£313,181	£54,621	£600,000	£0	£36,000	£0	£0	£60,000	£0	£36,000
Total		£9,161,008	£11,887,135	£9,299,483	£5,943,674	£6,544,770	£2,628,227	£2,191,617	£2,077,056	£2,038,012	£2,055,702

  

Service heading	Asset type	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
MP	4 bar main	£1,602,522	£1,631,048	£1,656,280	£1,683,819	£1,713,497	£1,741,627	£1,767,008	£1,765,462	£1,784,654	£1,812,984
	Governors	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0
LP		£0	£0	£0	£0	£0	£0	£0	£0	£0	£0
Domestic	Services	£169,719	£163,673	£134,521	£134,521	£134,521	£134,521	£134,521	£134,521	£134,521	£134,521
	Meters	£144,930	£142,996	£133,670	£133,670	£133,670	£133,670	£133,670	£133,670	£133,670	£133,670
IC	Services	£19,122	£13,074	£6,522	£5,514	£3,498	£2,490	£1,986	£2,490	£504	£504
	Meters	£37,091	£25,388	£12,711	£10,761	£6,860	£4,910	£3,935	£4,910	£975	£975
Large loads	Services	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0
	Meters	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0
Telemetry		£0	£0	£0	£0	£0	£0	£0	£0	£0	£0
Other capex	IT & office	£0	£0	£60,000	£0	£36,000	£0	£0	£60,000	£0	£36,000
Total		£1,973,384	£1,976,179	£2,003,704	£1,968,284	£2,028,046	£2,017,217	£2,041,119	£2,101,053	£2,054,325	£2,118,654

  

Service heading	Asset type	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
MP	4 bar main	£1,839,346	£1,869,785	£1,899,801	£1,927,289	£1,957,751	£1,985,985	£2,018,959	£2,051,328	£2,080,836	£2,113,707
	Governors	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0
LP		£0	£0	£0	£0	£0	£0	£0	£0	£0	£0
Domestic	Services	£134,521	£134,521	£134,521	£134,521	£134,521	£134,521	£134,521	£134,521	£134,521	£134,521
	Meters	£133,670	£133,670	£133,670	£133,670	£133,670	£133,670	£133,670	£133,670	£133,670	£133,670
IC	Services	£504	£0	£0	£0	£0	£0	£0	£0	£0	£0
	Meters	£975	£0	£0	£0	£0	£0	£0	£0	£0	£0
Large loads	Services	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0
	Meters	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0
Telemetry		£0	£0	£0	£0	£0	£0	£0	£0	£0	£0
Other capex	IT & office	£0	£0	£60,000	£0	£36,000	£0	£0	£60,000	£0	£36,000
Total		£2,109,016	£2,137,976	£2,227,992	£2,195,480	£2,261,942	£2,254,176	£2,287,150	£2,379,519	£2,349,027	£2,417,898



Capex outlined above is based on the following unit rates:

Mains		Infill		
MP				
Diameter	Unit Cost (stg£)	NEW BUILD INFILL	unit cost/m	£17.37
		Number of metres per property connected		16
250	£67.59			
315	£89.76	NIHE INFILL	unit cost	£30.23
355	£108.81	Number of metres per property connected		22
450	£184.24			
SPINE MAINS		EXISTING INFILL	unit cost	£45.49
Diameter	Unit Cost (stg£)	Services		
63	£33.05	I&C Services	Service	Meters
90	£33.35	Small	£504.01	£975.18
125	£45.18	Medium	£1,481.70	£2,959.46
180	£51.12	Large	£2,417.34	£11,168.22
250	£72.25			
315	£102.26	Domestic Services	Service	Meter
355	£119.43	New Build	£69.52	£69.08
63	£32.37	NIHE	£436.10	£122.87
90	£34.58	Existing	£215.94	£69.08
125	£40.20			
180	£53.16	Telemetry Costs		
250	£76.15			
315	£101.80	DM Customer	£1,500	
355	£119.43	Governor	£1,500	
450	£201.70			
Governor unit cost	£24,000			
Allowance/year for Variations	2.00%			
Engineering Contingency	5.00%			

Based on the following metres of mains

		2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
<b>Mains length m's</b>																				
MP	450mm	10,426	4,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	355mm	7,980	6,159	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	315mm	16,662	18,616	34,885	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250mm	16,300	18,192	7,517	10,022	7,517	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	180mm	27,642	47,749	12,633	18,950	31,583	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	125mm	15,120	14,100	8,040	8,040	10,720	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	90mm	950	1,100	4,673	4,673	6,231	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	63mm	0	0	2,478	2,478	5,368	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Governors		3	9	5	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LP	355mm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	315mm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	250mm	250	600	0	368	491	246	123	0	0	0	0	0	0	0	0	0	0	0	0
	180mm	800	0	0	1,932	2,898	3,864	966	0	0	0	0	0	0	0	0	0	0	0	0
	125mm	0	0	0	1,645	1,645	1,096	1,096	0	0	0	0	0	0	0	0	0	0	0	0
	90mm	0	0	0	2,273	2,273	1,515	1,515	0	0	0	0	0	0	0	0	0	0	0	0
	63mm	0	0	0	419	419	419	419	70	0	0	0	0	0	0	0	0	0	0	0
<b>Infill Mains</b>																				
New Build 90mm		1,248	3,871	3,629	3,629	3,629	4,732	4,732	4,732	4,732	4,732	4,730	4,730	4,730	4,730	4,730	4,730	4,730	4,730	4,730
(MP) 63mm		7,071	21,937	20,567	20,567	20,567	26,817	26,817	26,817	26,817	26,817	26,803	26,803	26,803	26,803	26,803	26,803	26,803	26,803	26,803
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NIHE 90mm		1,257	1,211	932	932	928	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(MP) 63mm		11,312	10,900	8,392	8,392	8,356	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Length (m)		117,018	148,435	103,747	84,321	102,626	38,690	35,669	31,619	31,550	31,550	31,533	31,533	31,533	31,533	31,533	31,533	31,533	31,533	31,533
Cumulative		131,263	279,698	383,445	467,766	570,392	609,081	644,750	676,370	707,919	739,469	771,002	802,536	834,069	865,602	897,136	928,669	960,202	991,736	1,023,269

Mains length m's		2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
MP	450mm	0	0	0	0	0	0	0	0	0	0	0
	355mm	0	0	0	0	0	0	0	0	0	0	0
	315mm	0	0	0	0	0	0	0	0	0	0	0
	250mm	0	0	0	0	0	0	0	0	0	0	0
	180mm	0	0	0	0	0	0	0	0	0	0	0
	125mm	0	0	0	0	0	0	0	0	0	0	0
	90mm	0	0	0	0	0	0	0	0	0	0	0
	63mm	0	0	0	0	0	0	0	0	0	0	0
Governors		0	0	0	0	0	0	0	0	0	0	0
LP	355mm	0	0	0	0	0	0	0	0	0	0	0
	315mm	0	0	0	0	0	0	0	0	0	0	0
	250mm	0	0	0	0	0	0	0	0	0	0	0
	180mm	0	0	0	0	0	0	0	0	0	0	0
	125mm	0	0	0	0	0	0	0	0	0	0	0
	90mm	0	0	0	0	0	0	0	0	0	0	0
	63mm	0	0	0	0	0	0	0	0	0	0	0
Infill Mains												
New Build 90mm		4,730	4,730	4,730	4,730	4,730	4,730	4,730	4,730	4,730	4,730	4,730
(MP) 63mm		26,803	26,803	26,803	26,803	26,803	26,803	26,803	26,803	26,803	26,803	26,803
		0	0	0	0	0	0	0	0	0	0	0
NIHE 90mm		0	0	0	0	0	0	0	0	0	0	0
(MP) 63mm		0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0
Total Length (m)		31,533	31,533	31,533	31,533	31,533	31,533	31,533	31,533	31,533	31,533	31,533
Cumulative		1,054,802	1,086,336	1,117,869	1,149,402	1,180,936	1,212,469	1,244,002	1,275,536	1,307,069	1,338,602	1,370,136

## Annex 4 - Operational Expenditure

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Rates	£10,386	£41,378	£93,881	£141,132	£201,988	£287,872	£316,793	£343,536	£373,764	£391,856
Manpower	£1,162,920	£1,317,525	£1,408,674	£1,490,257	£1,531,748	£1,554,773	£1,208,570	£1,269,718	£1,297,997	£1,319,260
Office	£304,587	£325,242	£326,958	£332,160	£337,317	£349,766	£349,766	£349,766	£349,766	£350,739
Advertising & PR	£2,131,661	£2,088,156	£999,451	£1,190,945	£1,168,940	£724,634	£372,800	£349,200	£346,400	£281,200
Licence & legal & prof	£164,649	£280,151	£199,300	£383,334	£201,497	£199,694	£178,729	£182,667	£182,845	£182,693
Maintenance	£281,242	£394,618	£434,481	£457,143	£491,179	£512,309	£529,990	£548,249	£567,021	£585,596
Other	£152,853	£160,748	£168,017	£156,912	£164,547	£165,443	£120,297	£128,338	£130,421	£127,734
Total	£4,208,298	£4,607,818	£3,630,762	£4,151,883	£4,097,216	£3,794,492	£3,076,945	£3,171,475	£3,248,214	£3,239,078
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Rates	£414,637	£428,533	£441,341	£453,794	£466,134	£478,387	£490,156	£500,638	£510,371	£519,980
Manpower	£1,340,166	£1,364,388	£1,388,656	£1,413,285	£1,439,102	£1,474,189	£1,497,376	£1,530,545	£1,561,638	£1,585,139
Office	£347,649	£347,649	£347,649	£347,649	£352,005	£353,940	£353,940	£353,940	£353,940	£358,731
Advertising & PR	£173,800	£133,000	£26,000	£22,000	£14,000	£10,000	£8,000	£10,000	£2,000	£2,000
Licence & legal & prof	£182,756	£182,503	£182,319	£182,442	£182,208	£182,796	£182,654	£182,879	£183,174	£183,117
Maintenance	£609,516	£627,013	£643,197	£659,496	£675,915	£706,170	£725,135	£721,556	£740,687	£754,210
Other	£132,150	£132,046	£132,086	£132,794	£132,721	£134,438	£134,559	£135,479	£136,121	£135,998
Total	£3,200,674	£3,215,133	£3,161,247	£3,211,458	£3,262,085	£3,339,920	£3,391,819	£3,435,037	£3,487,930	£3,539,176
	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Rates	£529,589	£539,171	£548,744	£558,317	£567,890	£577,464	£587,037	£596,610	£606,183	£615,757
Manpower	£1,620,809	£1,650,463	£1,682,699	£1,716,365	£1,747,423	£1,781,397	£1,813,486	£1,853,480	£1,885,754	£1,922,845
Office	£360,859	£360,859	£360,859	£360,859	£366,130	£368,471	£368,471	£368,471	£368,471	£376,844
Advertising & PR	£2,000	£0	£0	£0	£0	£0	£0	£0	£0	£0
Licence & legal & prof	£183,576	£183,615	£184,071	£184,224	£184,228	£184,647	£184,552	£185,023	£185,172	£185,270
Maintenance	£769,277	£785,075	£800,662	£817,040	£831,895	£845,439	£860,838	£875,992	£892,065	£908,159
Other	£136,998	£137,085	£138,078	£138,412	£138,420	£139,335	£139,127	£140,155	£140,479	£140,694
Total	£3,603,108	£3,656,268	£3,715,114	£3,775,218	£3,835,986	£3,896,752	£3,953,512	£4,019,732	£4,078,124	£4,149,569

## Opex Assumptions

### OPEX ASSUMPTIONS

#### Capitalization

Engineering labour pre 2012	80%
Engineering labour 2012 onwards	50%

	<b>2006-2010</b>	<b>2011 Onwards</b>
<b>Contractors Insurance</b>	£300,000	Pro rata capex
<b>Contractors Bond</b>	£10,000	Pro rata capex

#### Maintainance on total capex All of maintainance spend

<b>Contractors Labour</b>	<b>Assumed workers/year</b>	<b>Salary/year</b>
	4	£25,000

<b>Insurance</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2008 Onwards</b>
<b>Supply</b>	£60,000	£40,000	£30,000	£30,000
<b>Distribution</b>	£140,000	£160,000	£170,000	£170,000

<b>Rates</b>	Pass through	<b>Professional fees</b>	£
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<b>Training/employee/yr</b>	£3,200	<b>2005</b>	£362,000
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<b>Travel/employee/yr</b>	£5,000	<b>2006</b>	£562,000
		<b>2007</b>	£386,000
		<b>2008</b>	£285,000
		<b>2009 onwards</b>	£285,000

Office Costs	£117,476		£/yr
IT Costs/yr	£104,000	Supply licence	£150,000
Stationery, Photocopying & Postage	£59,340	Distribution licence	£50,000
		Energy Advisory Costs	£100,000

Telephone & Fax	Average cost/handset/year	Number of Handsets
Mobile	£1,440	24
Land line Telephone	£120	equal to total employees
Total Fixed Cost/year	£57,555	

	<b>2005</b>	<b>2006 Onwards</b>	<b>Apportionment</b>
Allocation of Shared Costs	£364,115	£240,000	50%

#### Market Incentivisation Costs

Load Type	<b>Incentive Cost</b>
Large I/C	£55,000
Medium I/C	£6,000
Small I/C	£2,000
Domestic (Existing)	£600

Marketing	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2008 Onwards</b>	
Promotional Information	£15,667	£15,667	£15,667	£15,667	£15,667	
Advertising - General		£560,000	£560,000	£560,000	£250,000	
Corporate Events		£33,333	£33,333	£33,333	£33,333	
<b>Maintenance</b>	<b>£</b>					
Price/metre main Installed	£0.33					
Design (% of total capex)	2.50%					
<b>Meter Reading &amp; Billing</b>	<b>£</b>					
GIS Costs/year	£60,000					
Meter Read and Billing Non -Telemetry	£12					
Meter Read and Billing Telemetry	£250					
Emergency Response	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010 Onwards</b>
Emergency Response cost base	£13,560	£93,360	£156,360	£177,360	£189,360	£201,360
Cost to attend gas escape/emergency	£200					
1 call per year for every x customers	8					
Control Room/Emergency Calls	£					
Control Room Dublin Fixed	£50,000	fixed/yr				
Killingworth Fixed	£150,336	fixed/yr				
Control Room Dublin Variable	£150	variable				
	£/year (average over 30 years)		Increase in real wages	2.00%		
Supply labour allocation	£78,608					