

Report on pavilion electric for HPC meeting 14-1-2020

BILLS 2019-20

Bill date	Amount	Day reading	Eve reading	Day units used	Eve units used
14 Jun 2019	265.96	11726	14028		
1 Oct 2019	53.78 including credit note for £372.47 following SSE engineer's reading. Clerk told to ignore bill and wait for updated one showing accurate readings	13245	14247	1519	219
9 Oct 2019	418.90 Including arrears statement £318.69 in credit and credit note for £53.78. Statement of account saying £46.43. Previously told to ignore this bill – see above.	13245	14247	???	???
11 Dec 2019	£365.32	13695	15247	450	1000

December bill is slightly underestimated.

Electricity prices for most of the billing period covered above were 18.45p per daytime unit, 15.61p per night time unit; approximate night time cheap period is between 23.00 & 07.00. These prices have been averaged in the costs table below to 17p per unit.

Bill amounts include standing charge and VAT.

Regular readings taken by G Still from 1.11.2019 as follows:

Date/day	Time	Day reading	Eve reading	Day Units used	Eve units used
1.11.19/F	08.31	13632	14549		

4.11.19/M	08.13	13639	14551	7	2
7.11.19/Th	08.21	13656	14580	17	29
8.11.19/F	08.17	13659	14593	3	13
11.11.19/M	08.20	13689	14596	30	3
12.11.19/Tu	08.15	13700	14611	11	15
13.11.19/W	08.31	13705	14624	5	13
14.11.19/Th	08.21	13709	14648	4	24
15.11.19/F	08.11	13714	14670	5	22
16.11.19/Sa	16.35	13745	14692	31	12
18.11.19/M	08.16	13749	14737	4	45
26.11.19/Tu	08.12	13812	28724	63	174
27.11.19/W	08.18	13823	14932	11	21
28.11.19/Th	08.32	13826	14954	3	22
29.11.19/F	08.20	13830	14976	4	23
2.12.19/M	08.17	13846	15043	16	67
3.12.19/Tu	08.15	13863	15065	17	22
5.12.19/Th	08.38	13883	15110	20	45
6.12.19/F	08.21	13904	15132	21	22
9.12.19/M	08.55	13920	15197	16	65
11.12.19/W	08.24	13943	15241	23	44
12.12.19/Th	13.05	13955	15263	12	22
13.12.19/F	08.21	13956	15285	1	22
16.12.19/M	08.14	13967	15351	11	66
17.12.19/Tu	08.20	13976	15373	9	22
18.12.19/W	08.43	13986	15395	10	22
19.12.19/Th	08.30	13996	15417	10	22
20.12.19/F	09.07	14020	15445	24	28
23.12.19/M	08.00	14027	15475	7	30
Total units			52 days	395	917
Average units			Per day	7.6	17.6

30.12.19/M	08.00	14046	15546	19	71
6.1.20/M	08.33	14065	15616	19	70
Total units			14 days	38	141
Average units			Per day	2.7	10
Total units			66 days	433	1058
Average units			Per day	6.46	15.79

Appliances in pavilion –

Appliance	Used by	Wattage (actual or average)	Estimated use	Approx. consumption per annum in kWh	Average cost per annum (£)
In kitchen area					
Fridge	PC staff	120	24 hrs x 365 days = 8760 hrs	1051	178
Microwave	“	600	1x 5 minute use x 260 days = 21 hrs	12	2
Kettle	“	2200	10 minutes per day x 260 days = 43 hrs	95	16
Radio	“	35	4 hrs per day x 260 days = 1040 hrs	364	62
2 x panel heaters	“, scouts, visitors	1000	6 hrs per day x 250 days = 1500 hrs	1500 x 2	255 each heater
1 x storage heater	“	2500	8 hrs per night x 182 nights = 1456 hrs	3640	619
Lights (x 4 strip lights in kitchen)	“, scouts, visitors	28	4 hrs per day x 260 days = 1040 hrs	291 x 4 lights	50 each light
Vacuum	“	500	¼ hr per week = 13 hrs	6.5	1.10
POU water heater	“, scouts, visitors	2000	½ hr per day x 260 days = 130 hrs	260	44

Elsewhere					
Fridge	Scouts, HHYFC, Feast?	150	24 hrs x 120 days = 2880 hrs	432	73
Chest freezer	“ “ “	150	24 hrs x 30 days = 720 hrs	108	18
Storage heater	“	1700	-	-	-
Immersion heater	“	3000	1 hr x 7 days = 7 hrs	21	4
Outside light with sensor x 2	All	5	½ hr x 365 days x 2 lights = 365 hrs	18	3
Floodlights x 4	Scouts, rugby team	100	10 hrs total x 4 = 40 hrs	4	<1
Totals					1,730.00 or 432 per quarter

In addition to the table above, the scouts have confirmed that they have used the floodlights on about 3 occasions this winter (Less than 8 Hours Total), and the touch rugby club used them a few times.

The scouts have used the panel heaters in the kitchen area on 2 evenings per week since the colder weather set in, whilst holding group meetings. There have also been a few committee meetings, minus a few evenings when no meeting was held. A second storage heater was installed near the old shower room last summer but was only switched on very recently and so has had a negligible effect on the bills to date.

The former Showers Water Tank and twin Immersion Heaters have been reinstalled by the scouts and were used over the Feast weekend, plus on another four or five occasions during the year – it is normally switched on for an hour or so.

A large fridge & a chest freezer have been installed by the scouts. The fridge has been switched on for about half of the 8 months since its installation. The freezer is only used just before and after major events, so scouts share its use with HHYFC and the Feast Committee. It was used for about 30 days total last year.

Clerk has checked wattage of appliances where possible and used internet figures for appliance consumption (eg but not limited [to this page](#)). Lighting has not been included except for kitchen area. Occasionally staff charge their drill, and a pressure washer is used when cleaning the van.

Based on average consumption figures & cost of electricity in the tables above, the electricity used in the pavilion is not excessive for the appliances in use. Average daytime consumption for the monitored period 1.11 – 23.12.19 is less than 8 units, night time consumption is less than 18 units, although there are aberrations. Some daytime readings are high, some night readings are high – presumably appliances were left on and/or floodlights used. During the 2 weeks 23.12.19 to 5.1.20 (shaded grey in table) , all non-essential appliances were switched off, including heaters (unless scouts used anything). Average consumption dropped to 2.7 units daytime, 10 units night time.

Clerk's suggestion to staff & scouts on 6.1.2020: leave off storage heater to check effect on consumption/bills. Storage heater is only considered efficient if heat output during the day is needed (ie no other heat source, which is not the case in the kitchen). If staff need to leave panel heater on overnight occasionally to dry wet gear or to stop pipes freezing in very cold weather this can be monitored. Ultimately the two-tier tariff is not very efficient as most of the electricity needs are during the daytime. Scouts agree with this. Switching off the main storage heater would save about £600 per year.

SSE has indicated slightly cheaper electricity may be available on a fixed tariff.