Geyser daily report for Monday, October 12

1 Overview

Total hot water used
$\begin{array}{lll} \text{Maximum hot water temperature (geyser setpoint)} & 49.0 \ ^{\circ}\text{C} \\ \text{Average hot water temperature} & 43.0 \ ^{\circ}\text{C} \\ \text{Coldest geyser outlet temperature} & 38.0 \ ^{\circ}\text{C} \\ \text{Average ambient temperature at geyser} & 20.0 \ ^{\circ}\text{C} \\ \end{array}$
Electrical energy consumed 11.3 kWh Effective energy consumed 6.7 kWh Standing losses 4.6 kWh Percentage energy wasted 40.7% Estimated cost of electricity $R 16.95$ Estimated cost of standing losses $R 6.90$
2 Other participant comparison

ID	104.00	106.00	107.00	109.00	112.00
Total Volume (1)	188.90	215.00	377.30	82.50	132.10
Electrical energy (kWh)	9.80	11.30	15.20	7.40	9.40
Effective energy (kWh)	7.60	6.70	13.70	4.30	6.60
Est cost (R)	14.70	16.95	22.80	11.10	14.10
Energy loss (kWh)	2.20	4.60	1.50	3.10	2.80
Loss (%)	22.40	40.70	9.90	41.90	29.80
Out Min (C)	44.00	38.00	38.00	59.00	39.00
Out Mean (C)	49.00	43.00	48.00	64.00	44.00
Out Max (C)	60.00	49.00	59.00	70.00	62.00
In Min (C)	15.00	14.00	13.00	18.00	12.00
In Mean (C)	21.00	20.00	24.00	24.00	15.00
In Max (C)	31.00	29.00	41.00	32.00	21.00
Amb Min (C)	14.00	13.00	13.00	18.00	12.00
Amb Mean (C)	20.00	20.00	25.00	25.00	17.00
Amb Max (C)	28.00	31.00	43.00	34.00	22.00
Total #events	21.00	26.00	37.00	10.00	2.00
Large #events	4.00	8.00	9.00	2.00	2.00
Small #events	17.00	18.00	28.00	8.00	0.00
Packet loss (%)	0.07	0.00	1.81	11.39	0.35

3 Hot water usage event summary

3.1 Large events

The following is a summary of events larger than 10 litres.

Number of events
Total volume of water consumed
Total energy consumed
Total estimated cost

	Start time	Volume (l)	Duration	Avg temperature	Est energy (kWh)	Est cost (R)
1	05:49:39	17.87	6.98	44.71	0.58	0.86
6	06:33:39	26.18	6.98	45.00	0.85	1.27
8	09:30:38	20.00	2.02	46.00	0.63	0.94
9	09:59:39	12.70	3.00	46.67	0.40	0.60
11	10:28:39	13.81	4.00	48.00	0.45	0.68
13	10:59:39	22.04	3.00	49.00	0.73	1.10
23	13:24:39	12.26	3.00	48.67	0.39	0.58
26	18:55:42	42.29	3.95	43.40	1.19	1.78

Table 1: List of events larger than 10 litres

3.2 Small events

The following is a summary of events *smaller* than 10 litres.

Number of events
Total volume of water consumed
Energy consumed
Estimated cost

	Start time	Volume (l)	Duration	Avg temperature	Est energy (kWh)	Est cost (R)
2	06:00:39	7.70	5.00	44.40	0.24	0.36
3	06:08:39	0.20	1.00	44.00	0.01	0.01
4	06:15:39	4.51	2.00	44.50	0.14	0.21
5	06:19:39	0.42	2.00	44.00	0.01	0.02
7	06:42:39	0.94	2.00	44.00	0.03	0.04
10	10:07:39	6.29	2.98	46.67	0.20	0.30
12	10:49:39	6.14	2.00	49.00	0.21	0.31
14	11:03:38	0.87	2.02	48.50	0.03	0.04
15	11:09:38	1.08	1.00	49.00	0.04	0.05
16	11:56:39	4.71	2.00	47.50	0.13	0.19
17	12:01:39	4.06	1.00	49.00	0.13	0.20
18	12:16:38	1.61	1.02	48.00	0.05	0.08
19	12:19:39	0.89	1.00	49.00	0.03	0.04
20	12:45:39	4.31	2.00	48.50	0.13	0.20
21	13:04:39	1.78	1.98	48.00	0.05	0.08
22	13:16:39	0.39	1.00	49.00	0.01	0.02
24	14:23:39	0.54	1.00	48.00	0.01	0.02
25	17:03:39	1.23	0.98	45.00	0.03	0.05

Table 2: List of events smaller than 10 litres

4 Graphs

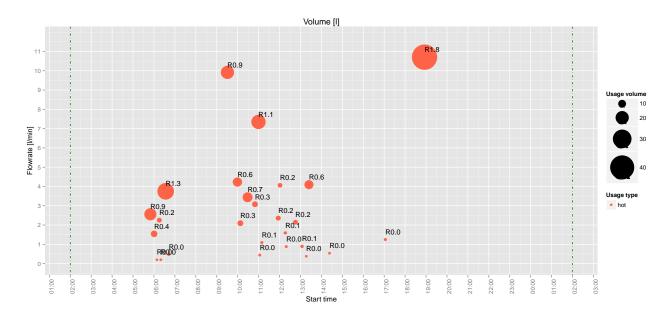


Figure 1: Usage events and volumes

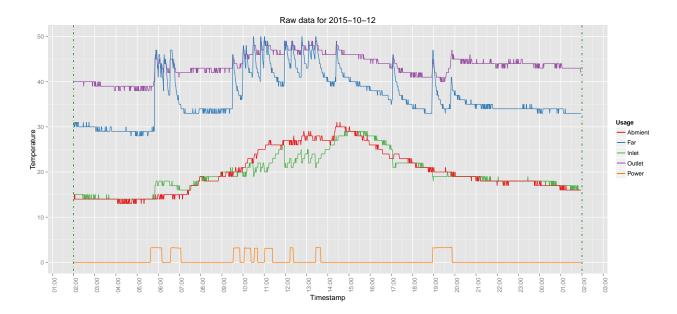


Figure 2: Raw data