

Electrical Consumption Investigation – Meter Discrepancy Analysis

Recorded meter readings for meters 2157373 marked 6303 and 2505704 marked 6301.

Key Metric	Value
Meter 6303 reading	73,456
Meter 6301 reading	19,650
Difference (kWh)	53,806
Estimated cost difference	\$9,147

Finding
Meter 6301 dropped to 0.0 kW when the house breaker was turned off.
Meter 6303 continued at approximately 2.0 kW after the house breaker was turned off.
This supports a meter/panel mismatch or wiring issue that should be verified by a utility load-isolation test.
Requested action: meter-to-panel verification and billing review.

Interpretation

The lifetime difference between the two meters is 53,806 kWh. At \$0.17/kWh, this equals an estimated cost difference of approximately \$9,147. Because both units were built and occupied at the same time, the difference is significant and should be investigated alongside the breaker-off test. The breaker-off test is the strongest technical indicator: one meter stopped completely while the other continued to advance. The workbook uses formulas so rates and assumptions can be updated in the Cost Impact sheet.

Chart Data – Average Load by Test Interval

Interval	Meter 6303 Avg kW	Meter 6301 Avg kW	Note
Apr21 2pm	2.00	0.25	Normal use
Apr23 3pm	2.16	0.49	Normal use
Apr26 1pm	1.67	0.49	HRV reduced
Apr27 noon	1.04	0.61	HRV unplugged
Apr27 5pm	0.80	0.20	Before breaker off
Apr27 8pm	2.00	0.00	Breaker off

Detailed Meter Reading Analysis

Meter	Date & Time	Meter Reading (kWh)	Change (kWh)	Hours Elapsed	Average Load (kW)	Test Condition / Notes
6303	2026-04-21 10:00	73,191				Baseline
6303	2026-04-21 14:00	73,199	8	4.00	2.00	Normal use
6303	2026-04-23 15:00	73,305	106	49.00	2.16	Normal use
6303	2026-04-26 13:00	73,422	117	70.00	1.67	HRV reduced setting
6303	2026-04-27 12:00	73,446	24	23.00	1.04	HRV unplugged
6303	2026-04-27 17:00	73,450	4	5.00	0.80	Before house breaker off
6303	2026-04-27 20:00	73,456	6	3.00	2.00	House breaker off
6301	2026-04-21 10:00	19,576				Baseline
6301	2026-04-21 14:00	19,577	1	4.00	0.25	Normal use
6301	2026-04-23 15:00	19,601	24	49.00	0.49	Normal use
6301	2026-04-26 13:00	19,635	34	70.00	0.49	HRV reduced setting
6301	2026-04-27 12:00	19,649	14	23.00	0.61	HRV unplugged
6301	2026-04-27 17:00	19,650	1	5.00	0.20	Before house breaker off
6301	2026-04-27 20:00	19,650	0	3.00	0.00	House breaker off

Lifetime Consumption Comparison

Metric	Value
Meter 6303 Total (kWh)	73,456
Meter 6301 Total (kWh)	19,650
Difference (kWh)	53,806

Meter	Total kWh
6303	73,456
6301	19,650

Estimated Cost Impact

Metric	Value
Total Difference (kWh)	53,806
Assumed Rate (\$/kWh)	\$0.17
Estimated Cost Difference	\$9,147
Low Estimate @ \$0.16/kWh	\$8,609
High Estimate @ \$0.18/kWh	\$9,685

Note: Update the assumed rate in cell B5 to test other electricity rates. The estimate does not include fixed monthly charges, taxes, or rate-tier changes unless reflected in the assumed rate.

Date,Amount (\$)

2026-04-20,708.82

2026-02-26,1113.94

2025-12-29,464.33

2025-12-09,483.06

2025-08-29,468.26

2025-07-22,429.45

2025-04-23,1081.57

2025-02-03,1015.24

2024-12-09,420.01

2024-10-10,413.69

2024-08-05,352.17

2024-06-05,1201.44

2024-02-14,1078.35

2023-10-06,370.29

2023-07-31,311.71

2023-05-31,433.27

2023-04-05,621.13

2023-02-08,501.33

2022-11-30,280.18

2022-10-03,276.42

2022-08-02,258.72

2022-06-14,375.52

2022-04-21,374.72

2022-03-10,864.14

TOTAL,13897.76