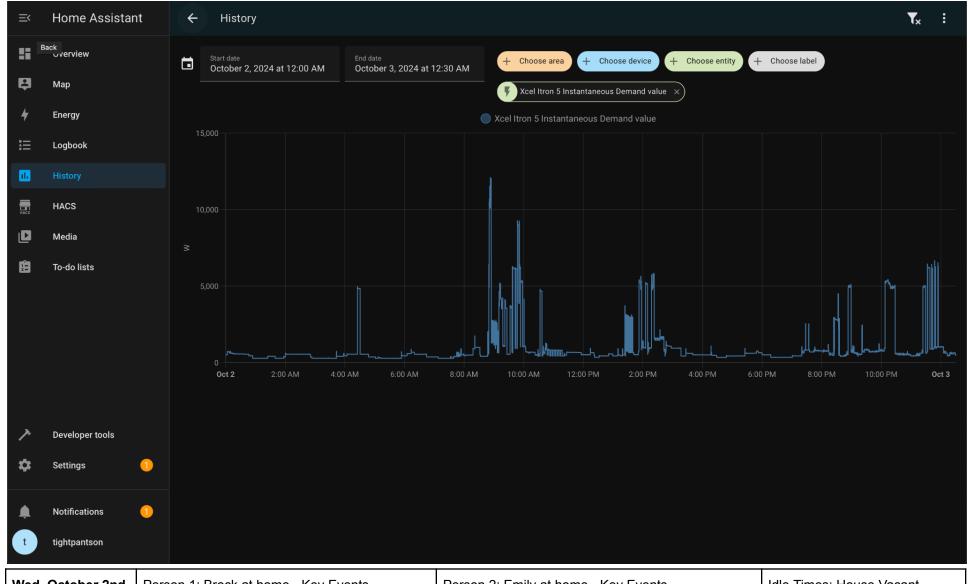
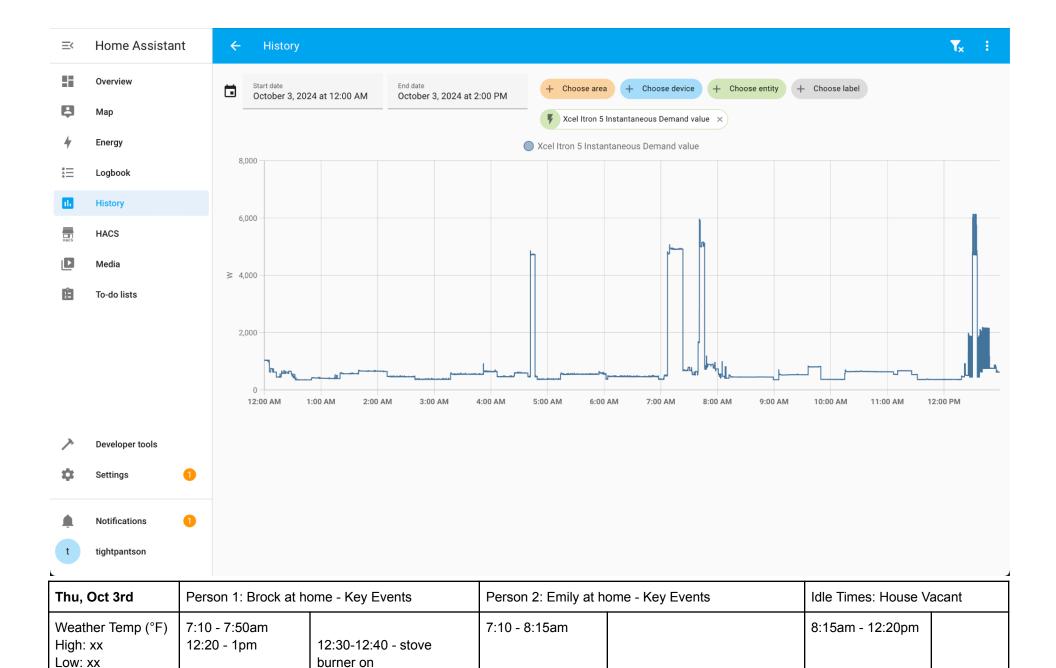


Tue, October 1st	Person 1: Brock at home - Key Events	Person 2: Emily at home - Key Events	Idle Times: House Vacant	
Weather Temp (°F) High: 66 Low: 40	7:50am - 11:55am 4:40pm - 4:55pm 6:15pm - 6:55pm 10:40pm - 12:25am	7:30 - 7:50am 5:30 - 10pm??	12pm - 4:40pm 5pm - 5:30pm??	



Wed, October 2nd	Person 1: Brock at home - Key Events		Person 2: Emily at home - Key Events		Idle Times: House Vacant	
Weather Temp (°F) High: 71 Low: 50	8am - 10:40am 1:15pm - 1:50pm 8:15pm - 9pm 9:55pm - 12:50am	11:25pm - start dryer	12:45pm-2:15pm 7:30pm-11:30pm			





## 2024-10-03-midday-checkin ☆ 🗈 🛆

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	А	В	С	D	E	F
1	entity_id	state (Watts)	last_changed			
2	sensor.xcel_itror	1035	2024-10-03T05:00:00.000Z		AVERAGE	744
3	sensor.xcel_itror	1034	2024-10-03T05:00:00.122Z		MIN	350
4	sensor.xcel_itror	1042	2024-10-03T05:00:05.904Z		MAX	6132
5	sensor.xcel_itror	1047	2024-10-03T05:00:11.613Z		MEDIAN	534
6	sensor.xcel itror	1046	2024-10-03T05:00:17.316Z			
0117	sensor.xcei_itror	4124	2024-10-03117:32:04.0002			
6118	sensor.xcel_itror	4718	2024-10-03T17:32:09.709Z			
6119	sensor.xcel_itror	4726	2024-10-03T17:32:15.272Z			
6120	sensor.xcel_itror	4721	2024-10-03T17:32:20.878Z			
6121	sensor.xcel_itror	4717	2024-10-03T17:32:26.556Z			
6122	sensor.xcel_itror	6130	2024-10-03T17:32:32.332Z			
6123	sensor.xcel_itror	4720	2024-10-03T17:32:43.882Z			
6124	sensor.xcel_itror	4725	2024-10-03T17:32:55.266Z			
6125	sensor.xcel itror	4729	2024-10-03T17:33:01.000Z			
6126	sensor.xcel itror	4719	2024-10-03T17:33:06.736Z			
6127	sensor.xcel itror	6132	2024-10-03T17:33:12.473Z	< 12:33pm "pe	eak demand ever	nt" (stovetop burner on oven)
6128	sensor.xcel_itror	4714	2024-10-03T17:33:18.309Z			·
6129	sensor.xcel_itror	4712	2024-10-03T17:33:23.978Z			
6130	sensor.xcel_itror	4714	2024-10-03T17:33:29.570Z			
6131	sensor.xcel_itror	6127	2024-10-03T17:33:35.368Z			
6132	sensor.xcel_itror	4721	2024-10-03T17:33:41.141Z			
6133	sensor.xcel_itror		2024-10-03T17:33:46.773Z			
6134	sensor.xcel itror		2024-10-03T17:33:52.611Z			

## "Applied Economics...in residential electricity consumption"

**Applied economics** is essentially the application of economic theory and data analysis to real-world problems and situations. It focuses on using economic models and empirical data to understand and solve practical issues, which can range from public policy evaluation to business decision-making. Instead of staying in the abstract realm, applied economics brings theory down to earth by testing and using it in specific contexts like labor markets, health, energy, and even individual households(<u>Wikipedia</u>)(<u>Investopedia</u>).

In your case, where you want to analyze micro-level data for a single residential household, applied economics can indeed be used. You could collect real-world usage data (electricity consumption, appliance use patterns, etc.) and conduct statistical analysis to see how demand shifts, or doesn't shift, in response to changes like dynamic pricing or the use of smart technologies (e.g., smart EV chargers or thermostats). This analysis can then help you understand whether incentives (like lower prices during solar peak hours) affect consumer behavior, and how much flexibility can be harnessed from these demand-side shifts.

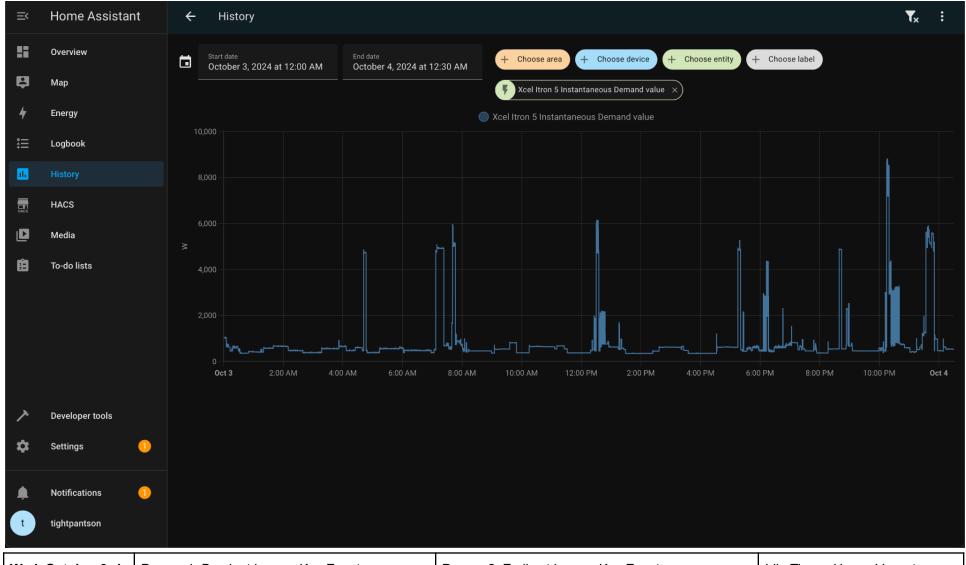
This type of analysis often falls under **empirical economics**, specifically **microeconometrics** if you're working with household-level data. You would apply econometric models to test hypotheses, such as how much a household's energy use changes with pricing signals or under different tariff structures. The results from these analyses could then be scaled up to understand broader implications for energy policy or grid stability, contributing to the larger energy transition picture.

So, what you're considering is a **microeconomic application of applied economics** in the field of energy usage. By doing this, you can help connect **individual household behavior** with broader trends in demand response, contributing insights that can inform future policy or energy strategies.

## "Demand Response"

• is a <u>change in the power consumption of an electric utility customer</u> to better match the demand for power with the supply.

https://en.wikipedia.org/wiki/Demand\_response



Wed, October 3rd	Person 1: Brock at home - Key Events		Person 2: Emily at home - Key Events		Idle Times: House Vacant	
Weather Temp (°F) High: 63 Low: 44	7:10 - 7:50am 12:20 - 1pm 10:10pm - 1am	12:30-12:40 - stove burner on ~10:30 - oven burner on ~11 - laundry washerxtre	7:10 - 8:15am		8:15am - 12:20pm	