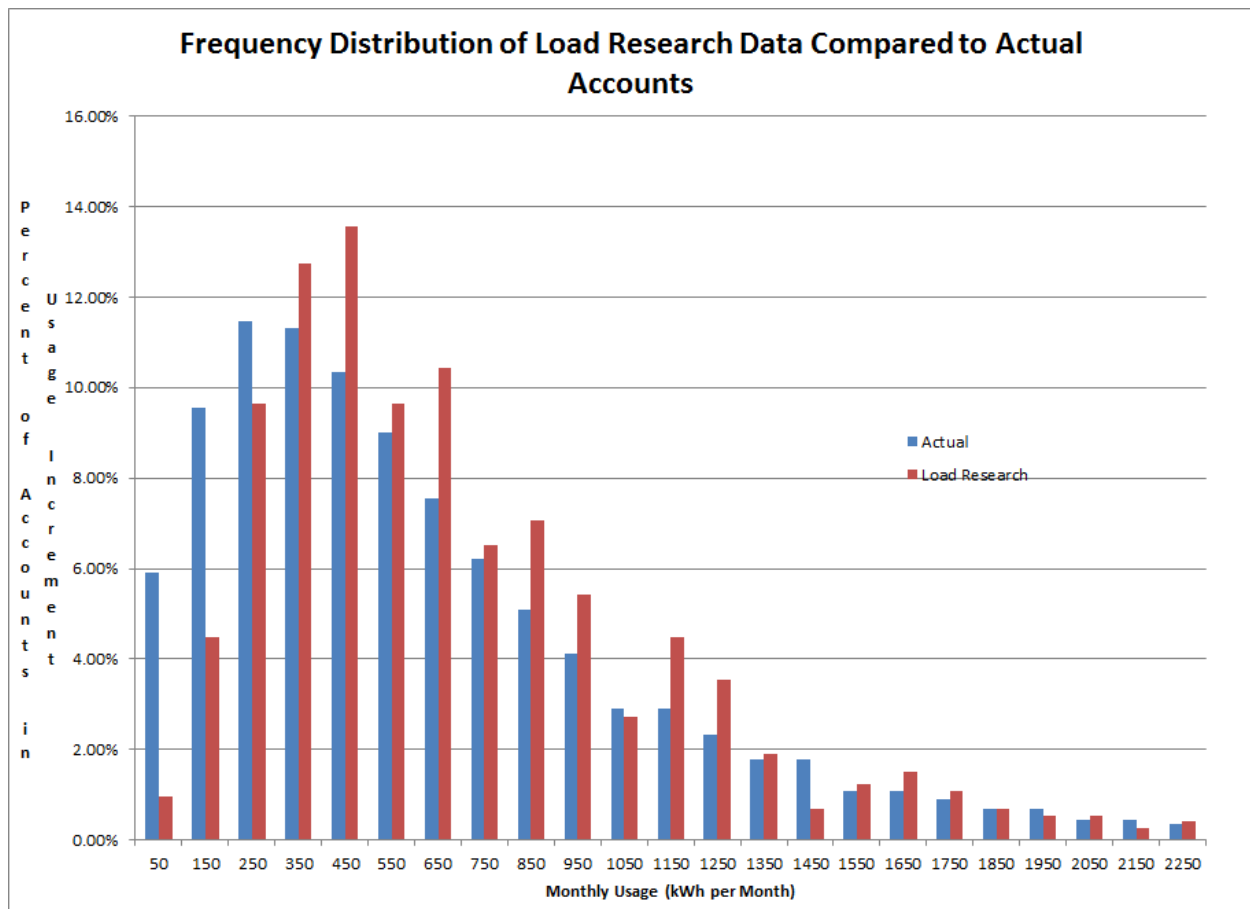


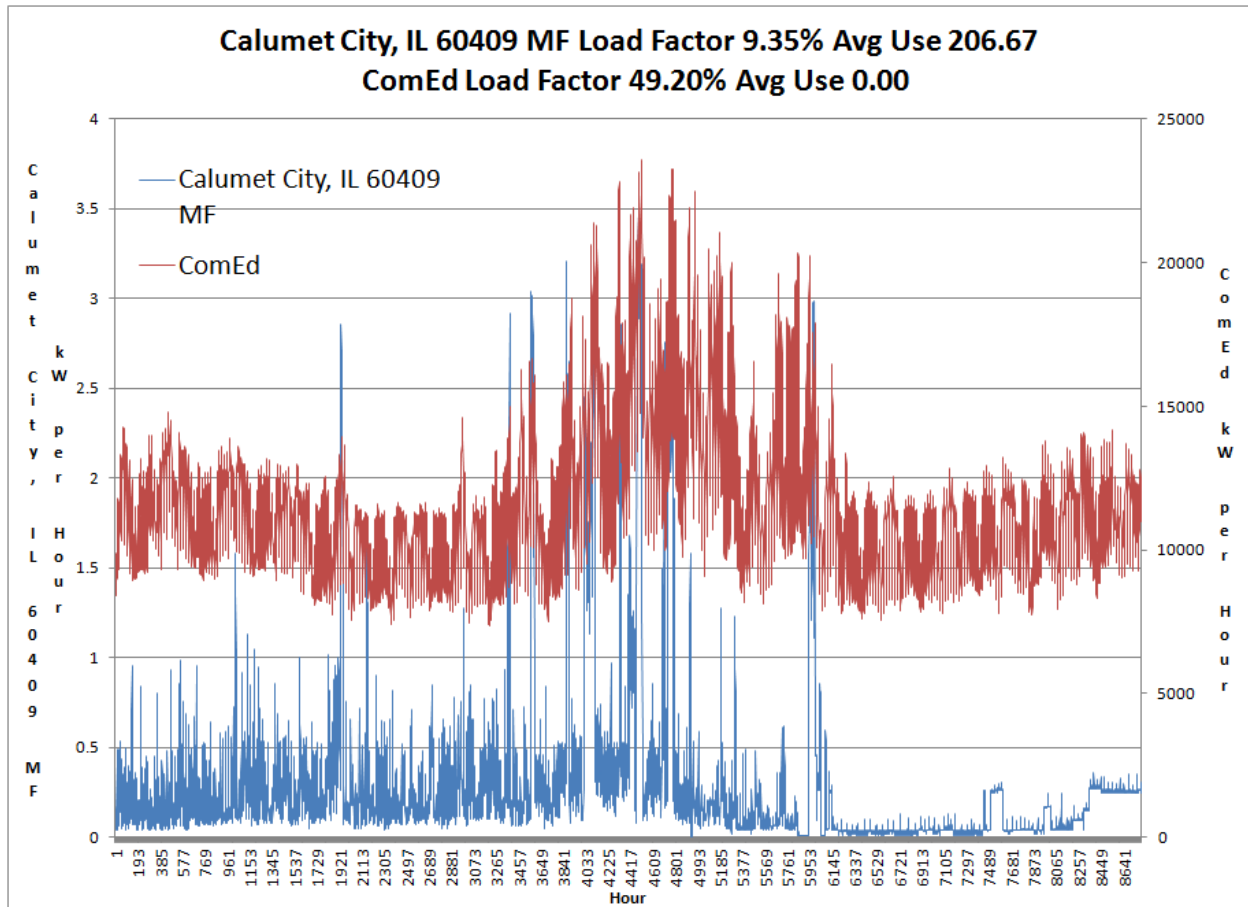
The next figure shows how the City of Chicago is under-represented in the data. For example there were only 26 non-space heat single family consumers sampled in the City relative to the total customers sampled of 385. This means that in terms of single family consumers, the City represented only 6.75% of the sample, while the actual population percentage is 18.89%. The table below shows that there is a similar under-representation for multi-family consumers although it is less dramatic.

	Single Family Chicago	Single Family Outside Chicago	Single Family Total	Multi-Family Chicago	Multi-Family Outside Chicago	Multi-Family Total
Annual Bills	421,813.58	1,810,878.75	2,232,692.33	610,137.58	432,374.58	1,042,512.17
Load Research	26.00	359.00	385.00	175.00	186.00	361.00
Percent of Actual	18.89%	81.11%		58.53%	41.47%	
Percent of Load Research	6.75%	93.25%		48.48%	51.52%	

The general under-representation of low use consumers in the load research study is illustrated on the graph below. The area under both of the distributions sums to one. The load research sample has far fewer consumers in the low use categories and over-representation in the 350-950 categories. This distortion could have quite a large effect on the allocation of costs to the residential class.

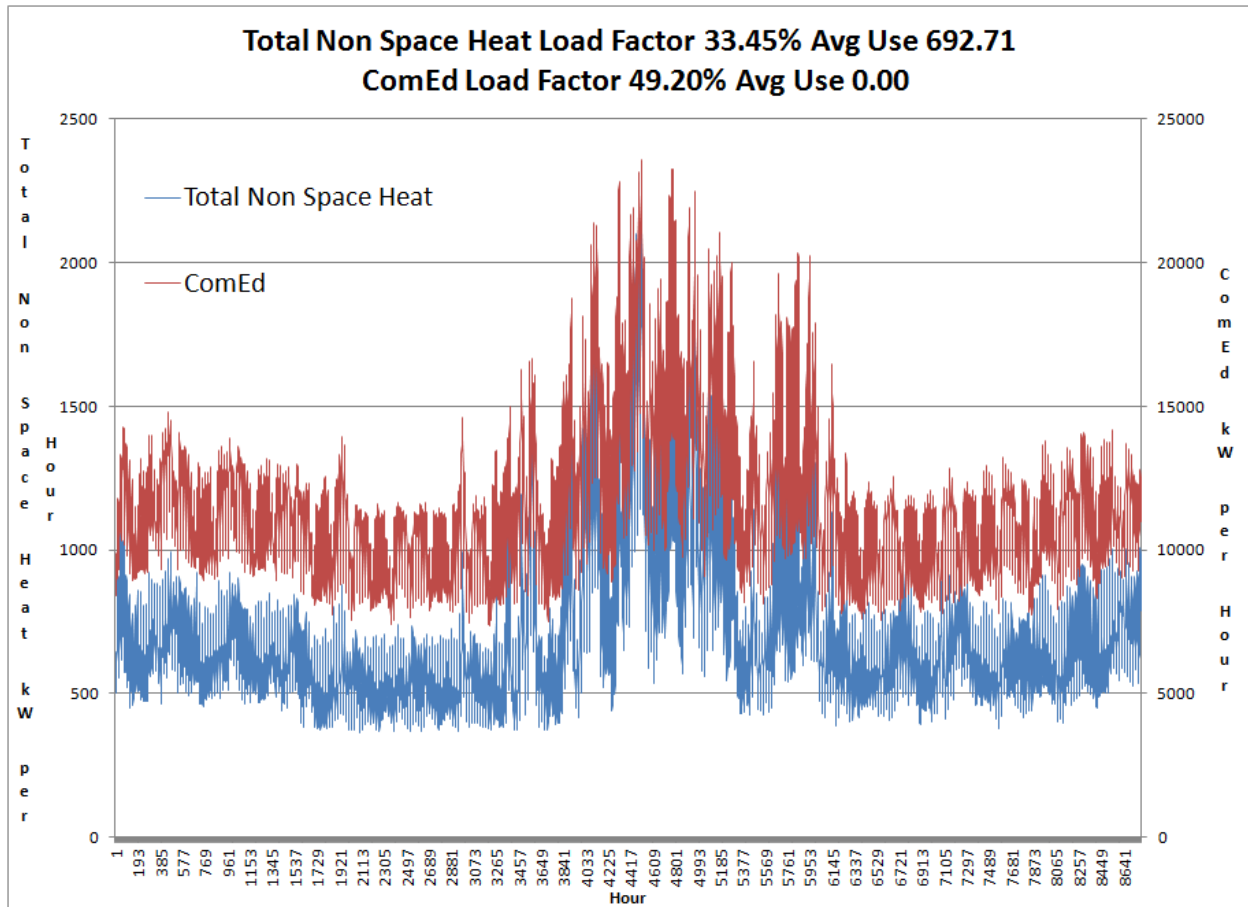


In reviewing the data we have created a graph that can display the hourly data for a selected consumer. The graph below compares aggregate hourly loads to one of the sample consumers from Calumet City (there are 26 samples from Calumet City that appear to be part of the same apartment block). In the graph below there may have been a problem with the meter or alternatively the apartment may have been vacant.



Review of Aggregate Load Research Data

The graphs below review various different aggregations of the load research data. The first graph presents the aggregate loads for the entire ComEd system (for all classes) compared to the aggregate loads in the load research sample. In 2012 the ComEd peak occurred on July 6 at 5:00 PM. The load factor presented on the top of the graph is the average load over the year divided by the July 6th load. The residential load factor is only 33% compared to the overall load factor of 49% (the overall load factor for the system in ComEd's cost study is 46%).



To illustrate the importance of the load factor in cost allocation, the table below shows how much costs to the residential class are increased by virtue of having a lower load factor than for the overall system. If single family consumers had a load factor of 46% instead of 29% (the data in ComEd's ECOSS is different than the load research) then their costs would be reduced by 35%.

	Single Family 2013 Case	Multi-Family 2013 Case	Total System 2013 Case
Energy	20,471,628,554	4,425,830,554	88,042,754,289
Peak	7,804,759	1,646,277	21,687,840
Average Energy per Hour	2,336,944	505,232	10,050,543
Load Factor	29.94%	30.69%	46.34%
1/Load Factor	3.34	3.26	2.16
Peak to Energy with System Load Factor	2.16	2.16	2.16
Peak with System Load Factor	5,042,839	1,090,228	21,687,840
Percent Decrease in Cost from System Load Factor	35.4%	33.8%	100.0%

The second graph of this section shows the loads of the single family and multi-family non-space heat consumers. In the 1994 rate case the multi-family load factor was dramatically different from the load factor used in the current case as shown in the excerpt below where the multi-family load factor was 54% and the single family load factor was only 31%.