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As we move to "electrify everything", utilities must provide end users with useful, actionable information.

Our current utility billing system is **vague, confusing,** and **contributes to peak problems.**

Utility Bill for CLIENT X

CONS: 15600 KWH   DEM: 48.80 KW   32 DAY PERIOD

MARKET			
ENERGY FIRST	15600 KWH	@ 0.081346	$1,269.00
DEMAND FIRST	5.00 KW		$30.61
DEMAND SECOND	43.80 KW	@ 6.1226667	$268.17
SUBTOTAL			$1,567.78
ADJUSTMENT	15600 KWH	@ 0.0536750	$837.33
MFC CHARGE	15600 KWH	@ 0.0012645	$19.73
SUBTOTAL			$2,424.84
GRT		2.4066%	$58.36
MARKET SUBTOTAL			**$2,483.20**
DELIVERY			
ENERGY FIRST	15600 KWH	@ 0.0453719	$707.80
DEMAND FIRST	5.00 KW		$87.16
DEMAND SECOND	43.80 KW	@ 17.0133333	$745.18
SUBTOTAL			$1,540.14
ADJUSTMENT	15600 KWH	@ -0.0010500	-$16.38
METERING+BPP			$0.49
RDM CHARGE	15600 KWH	@ -0.0007410	-$11.56
PSC CHARGE	15600 KWH	@ 0.003945	$61.54
SUBTOTAL			$1,574.23
GRT		2.3867%	$37.57
DELIVERY SUBTOTAL			**$1,611.80**
TOTALS			
(MARKET+DELIVERY) SUBTOTAL			$4,095.00
SURCHARGE		10%	$409.50
PLUS			$95.00
SUBTOTAL			$4,599.50
TAX		8.875%	$408.21
SUBTOTAL			$5,007.71
TOTAL			**$5,007.71**

As we move to "electrify everything", utilities must provide end users with useful, actionable information.

Even after a thorough analysis, information is **not optimized for improvements**.
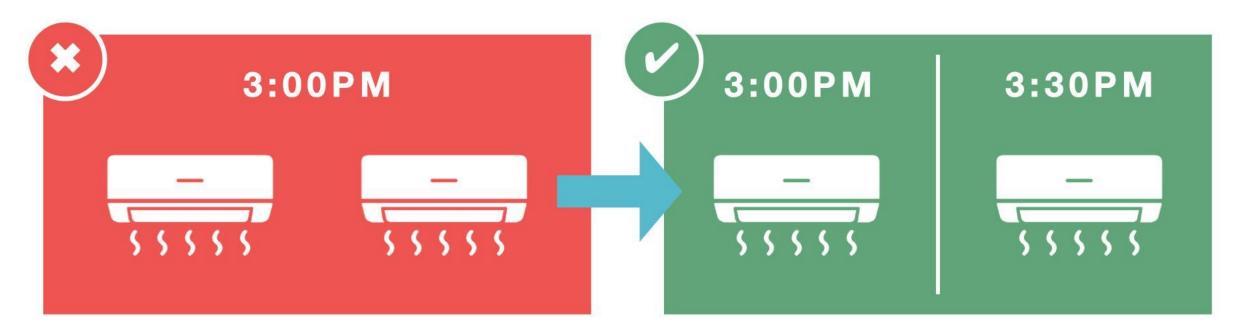
A smart, analytical billing system is **necessary**.

Utility Bill Analysis for CLIENT X

BILLING MONTH	TOTAL	KWH	$ FOR KWH	KW	$ FOR KW	MISC CHARGES
Dec - Jan	$5,007.71	15,600	$2,875.67	48.8	$1,129.04	$1,000.92
Jan - Feb	$4,880.43	17,440	$2,871.57	47.2	$1,023.77	$983.13
Feb - March	$4,619.89	16,240	$2,666.45	43.2	$999.48	$951.87
March - April	$4,943.67	15,520	$2,872.06	48.8	$1,047.98	$1,019.67
April - May	$5,981.74	17,920	$3,240.89	62.4	$1,526.80	$1,206.79
May - June	$9,368.96	24,160	$4,297.80	100	$3,062.67	$1,925.66
June - July	$10,711.98	28,800	$4,913.02	100	$3,864.73	$2,147.12
July - Aug	$10,875.09	32,320	$5,453.32	100	$3,244.13	$2,143.47
Aug - Sept	$9,731.25	29,920	$4,949.07	84.8	$2,845.89	$1,927.27
Sept - Oct	$10,173.05	29,040	$5,185.84	88	$3,008.19	$1,969.93
Oct - Nov	$7,263.95	22,400	$3,942.31	72.8	$1,819.81	$1,494.80
Nov Dec	$7,707.98	24,800	$4,460.90	64.8	$1,530.49	$1,717.81
TOTAL	**$91,265.70**	**274,160**	**$47,728.88**	**860.8**	**$25,102.97**	**$18,488.44**
Blended Rate per KWH	$0.333					
KWH Devoted to Lighting from Survey	92,719 kwh					
Percent of Electric Bill On Lighting	34%					

By providing more billing information for cause and effect, peak demand for the entire city could be greatly reduced.

Billing info doesn't warn commercial customers about the causes and remedies (or even the existence of) Demand Charges.

— **I.E**. a bill could suggest that 2 AC compressors cycling simultaneously at 3pm is a problem that could be solved by moving one of them to a 3:30 pm schedule.

By not making billing analytics more transparent, peak demand will only overload already overloaded systems even more.

By some estimates, if we "electrify everything", we will experience **winter peaks that are 4x our existing summer peak.**

WINTER PEAK

SUMMER PEAK

Understandable consumption analysis, as part of billing, would go a long way in fixing this.

Regarding IoT, Technology and Innovation, to achieve NYC's 2050 Carbon & Equity goals, the most critical obstacle to overcome is smart, transparent analytics in billing.