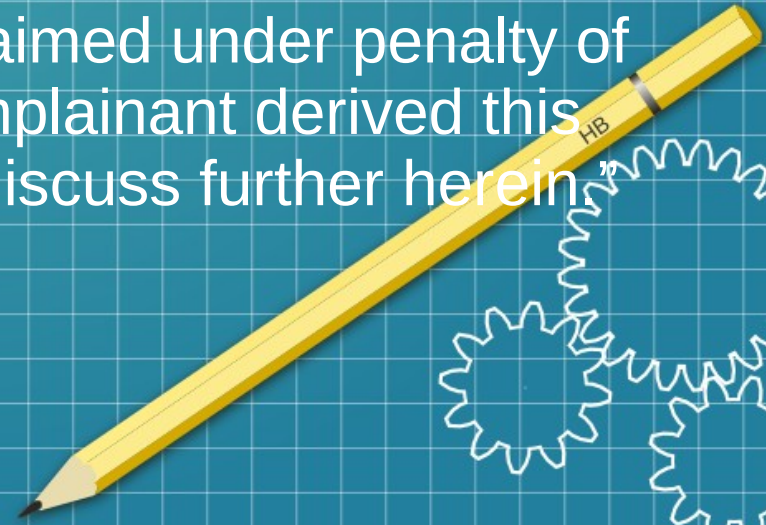


How To Use a Spreadsheet



For Southern California Edison who has claimed under penalty of perjury that, “SCE is unsure how the Complainant derived this dollar amount in order to understand and discuss further herein.”

(pages 11 & 12 of the SCE “answer”)



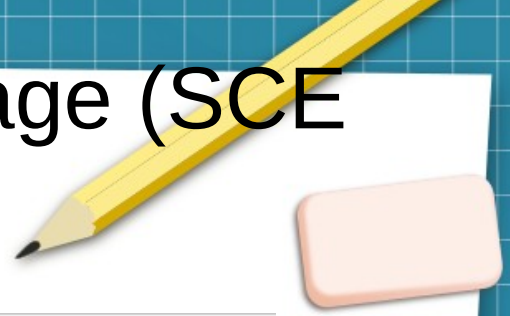
Sum All *NET* Off-Peak Grid kWh Usage (Tesla data)

K73 f_x Σ ▾ = =SUM(J2:J65,J86:J97)

	A	B	C	D	E	F	G	H	I	J	K
1	Date	StartTime	EndTime	kWh From S	kWh 2 SCE	Peak?	Home (kWh)	Solar (kWh)	Powerwall (kWh)	Grid (kWh)	Total kWh discrepancy
62	2022-10-27	03:00:00 PM	03:15:00 PM	0	1.59	-	0.14	1.73	0.00	-1.58	
63	2022-10-27	03:15:00 PM	03:30:00 PM	0	1.49	-	0.14	1.63	0.00	-1.49	
64	2022-10-27	03:30:00 PM	03:45:00 PM	0	1.41	-	0.11	1.52	0.00	-1.41	
65	2022-10-27	03:45:00 PM	04:00:00 PM	0	1.28	-	0.11	1.39	0.00	-1.28	
66	2022-10-27	04:00:00 PM	04:15:00 PM	0	1.12	-1.12	0.13	1.25	0.00	-1.13	Total or Off-Peak kWh
67	2022-10-27	04:15:00 PM	04:30:00 PM	0	0.97	-0.97	0.13	1.10	0.00	-0.97	-39.99
68	2022-10-27	04:30:00 PM	04:45:00 PM	0	0.85	-0.85	0.10	0.94	0.00	-0.85	-35.64
69	2022-10-27	04:45:00 PM	05:00:00 PM	0	0.67	-0.67	0.11	0.77	0.00	-0.67	-40.05
70	2022-10-27	05:00:00 PM	05:15:00 PM	0	0.46	-0.46	0.13	0.59	0.00	-0.46	0.06
71	2022-10-27	05:15:00 PM	05:30:00 PM	0	0.29	-0.29	0.13	0.41	0.00	-0.29	\$0.01
72	2022-10-27	05:30:00 PM	05:45:00 PM	0	0.06	-0.06	0.11	0.16	0.02	-0.06	dollar amount in cell just above is ONLY off-peak
73	2022-10-27	05:45:00 PM	06:00:00 PM	0	0	0.00	0.08	0.01	0.08	0.00	-35.58
74	2022-10-27	06:00:00 PM	06:15:00 PM	0.01	0.01	0.00	0.16	0.00	0.16	0.00	

Note that the formula within the cell being highlighted is shown in the box at the top of the spreadsheet.

Sum All *NET* Off-Peak Grid kWh Usage (SCE data)



=SUM(D2:D65,D86:D97)-SUM(E2:E65,E86:E97)

	D	E	F	G	H	I	J	K
	kWh From S	kWh 2 SCE	Peak?	Home (kWh)	Solar (kWh)	Powerwall (kWh)	Grid (kWh)	Total kWh discrepancy
PM	0	1.59	-	0.14	1.73	0.00	-1.58	
PM	0	1.49	-	0.14	1.63	0.00	-1.49	
PM	0	1.41	-	0.11	1.52	0.00	-1.41	
PM	0	1.28	-	0.11	1.39	0.00	-1.28	
PM	0	1.12	-1.12	0.13	1.25	0.00	-1.13	Total or Off-Peak kWh
PM	0	0.97	-0.97	0.13	1.10	0.00	-0.97	-39.99
PM	0	0.85	-0.85	0.10	0.94	0.00	-0.85	-35.64

↑ Use ↑ Production

Convert Off-Peak kWh Discrepancy to \$\$\$

= ((K73-K68)*0.12676)+((K73-K68)*0.06132)

	D	E	F	G	H	I	J	K	T
	kWh From	kWh 2 SCE	Peak?	Home (kWh)	Solar (kWh)	Powerwall (kWh)	Grid (kWh)	Total kWh discrepancy	
PM	0	1.59	-	0.14	1.73	0.00	-1.58		
PM	0	1.49	-	0.14	1.63	0.00	-1.49		
PM	0	1.41	-	0.11	1.52	0.00	-1.41		
PM	0	1.28	-	0.11	1.39	0.00	-1.28		
PM	0	1.12	-1.12	0.13	1.25	0.00	-1.13	Total or Off-Peak kWh	P
PM	0	0.97	-0.97	0.13	1.10	0.00	-0.97		-39.99
PM	0	0.85	-0.85	0.10	0.94	0.00	-0.85		-35.64
PM	0	0.67	-0.67	0.11	0.77	0.00	-0.67		-40.05
PM	0	0.46	-0.46	0.13	0.59	0.00	-0.46		0.06
PM	0	0.29	-0.29	0.13	0.41	0.00	-0.29		\$0.01
PM	0	0.06	-0.06	0.11	0.16	0.02	-0.06		dollar amount in cell just above is ONLY off-peak

SCE kWh is subtracted from Tesla kWh and then this number is multiplied by the Delivery Charge Rate listed on the corresponding bill.

This process is repeated for the Generation Charge rate from the bill.

Next, these two dollar amounts are added to complete this cell's work.

Dollar Costs are presented from SCE's perspective. Thus, positive numbers indicate an amount In favor of the customer, while negative values indicate amounts in favor of SCE.

Repeat the Process for Peak Hours



=SUM(J66:J85)

	D	E	F	G	H	I	J	K	L	M	N
	kWh From Solar	kWh 2 SCE	Peak?	Home (kWh)	Solar (kWh)	Powerwall (kWh)	Grid (kWh)	Total kWh discrepancy	Total Peak kW discrepancy	Total cost for this billing	
PM	0	1.59	-	0.14	1.73	0.00	-1.58				
PM	0	1.49	-	0.14	1.63	0.00	-1.49				
PM	0	1.41	-	0.11	1.52	0.00	-1.41				
PM	0	1.28	-	0.11	1.39	0.00	-1.28				
PM	0	1.12	-1.12	0.13	1.25	0.00	-1.13	Total or Off-Peak kWh	Peak kWh		
PM	0	0.97	-0.97	0.13	1.10	0.00	-0.97	-39.99	-4.42	Net Power from Grid (Tesla)	

Sum of *NET* Peak kWh Usage according to Tesla data.

Determine *NET Peak* Grid kWh (SCE data)

For each 15-minute interval

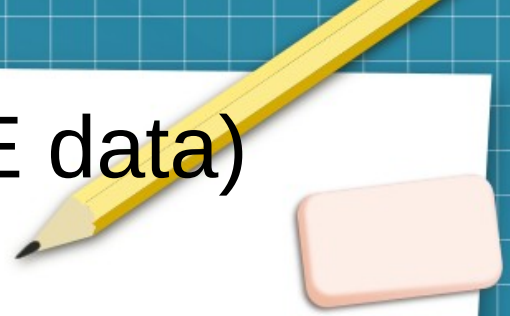
=IF(B66<0.6666,"-",IF(B66>0.874,"-",D66-E66))

	D	E	F	G
	kWh From SCE	kWh 2 SCE	Peak?	Home (kWh)
PM	0	1.59	-	
PM	0	1.49	-	
PM	0	1.41	-	
PM	0	1.28	-	
PM	0	1.12	-1.12	
PM	0	0.97	-0.97	
PM	0	0.85	-0.85	
PM	0	0.67	-0.67	

The “IF” statements determine whether or not the data is within peak hours using spreadsheet time Numerical Representations.

Then, solar energy provided to SCE is subtracted from the energy SCE claims we used for each 15 minute interval.

Sum All NET Peak Grid kWh (SCE data)



=SUM(F66:F85)

	D	E	F	G	H	I	J	K	L	M	N
	kWh From Solar	kWh 2 SCE	Peak?	Home (kWh)	Solar (kWh)	Powerwall (kWh)	Grid (kWh)	Total kWh discrepancy	Total Peak kW discrepancy	Total cost for this billing	
PM	0	1.59	-	0.14	1.73	0.00	-1.58				
PM	0	1.49	-	0.14	1.63	0.00	-1.49				
PM	0	1.41	-	0.11	1.52	0.00	-1.41				
PM	0	1.28	-	0.11	1.39	0.00	-1.28				
PM	0	1.12	-1.12	0.13	1.25	0.00	-1.13	Total or Off-Peak kWh	Peak kWh		
PM	0	0.97	-0.97	0.13	1.10	0.00	-0.97	-39.99	-4.42	Net Power from Grid (Tesla)	
PM	0	0.85	-0.85	0.10	0.94	0.00	-0.85	-35.64	n.a.	Off Peak Net Power from Grid	
PM	0	0.67	-0.67	0.11	0.77	0.00	-0.67	-40.05	-4.41	Net Power from Grid (SCE)	

Subtract SCE Net peak usage from Tesla Net peak usage to determine peak kWh discrepancy

=L67-L69

	D	E	F	G	H	I	J	K	L	M	N
	kWh From S	kWh 2 SCE	Peak?	Home (kWh)	Solar (kWh)	Powerwall (kWh)	Grid (kWh)	Total kWh discrepancy	Total Peak kW discrepancy	Total cost for this bi	
PM	0	1.59	-	0.14	1.73	0.00	-1.58				
PM	0	1.49	-	0.14	1.63	0.00	-1.49				
PM	0	1.41	-	0.11	1.52	0.00	-1.41				
PM	0	1.28	-	0.11	1.39	0.00	-1.28				
PM	0	1.12	-1.12	0.13	1.25	0.00	-1.13	Total or Off-Peak kWh	Peak kWh		
PM	0	0.97	-0.97	0.13	1.10	0.00	-0.97	-39.99		-4.42	Net Power from Grid (
PM	0	0.85	-0.85	0.10	0.94	0.00	-0.85	-35.64	n.a.		Off Peak Net Power f
PM	0	0.67	-0.67	0.11	0.77	0.00	-0.67	-40.05		-4.41	Net Power from Grid (
PM	0	0.46	-0.46	0.13	0.59	0.00	-0.46	0.06		-0.01	Discrepancy (T-SCE)

Convert Peak kWh Discrepancy to \$\$\$



$$=(L70*0.21491)+(L70*0.25297)$$

	D	E	F	G	H	I	J	K	L	M	N
	kWh From Solar	kWh 2 SCE	Peak?	Home (kWh)	Solar (kWh)	Powerwall (kWh)	Grid (kWh)	Total kWh discrepancy	Total Peak kW discrepancy	Total cost for this billing	
PM	0	1.59	-	0.14	1.73	0.00	-1.58				
PM	0	1.49	-	0.14	1.63	0.00	-1.49				
PM	0	1.41	-	0.11	1.52	0.00	-1.41				
PM	0	1.28	-	0.11	1.39	0.00	-1.28				
PM	0	1.12	-1.12	0.13	1.25	0.00	-1.13	Total or Off-Peak kWh	Peak kWh		
PM	0	0.97	-0.97	0.13	1.10	0.00	-0.97	-39.99		-4.42	Net Power from Grid (Tesla)
PM	0	0.85	-0.85	0.10	0.94	0.00	-0.85	-35.64	n.a.		Off Peak Net Power from
PM	0	0.67	-0.67	0.11	0.77	0.00	-0.67	-40.05		-4.41	Net Power from Grid (SCE)
PM	0	0.46	-0.46	0.13	0.59	0.00	-0.46	0.06		-0.01	Discrepancy (T-SCE)
PM	0	0.29	-0.29	0.13	0.41	0.00	-0.29	\$0.01		-\$0.00	Approx. cost of discrepancy

dollar amount in cell iust

Same process as for Off-Peak:

SCE kWh is subtracted from Tesla kWh and then this number is multiplied by the Delivery Charge Rate listed on the corresponding bill.

This process is repeated for the Generation Charge rate from the bill.

Next, these two dollar amounts are added to complete this cell's work.

Dollar Costs are presented from SCE's perspective. Thus, positive numbers indicate an amount In favor of the customer, while negative values indicate amounts in favor of SCE.

The SCE bills are the Source of the Rates in my Spreadsheets

This is page 5 of the bill for the period captured in the spreadsheet first provided to SCE on May 24, 2023 (5+ months ago by the time of the hearing).

SOUTHERN CALIFORNIA
EDISON[®]
An EDISON INTERNATIONAL[®] Company

Go paperless at www.sce.com/ebilling. It's

CALL

Details of your tracked charges

Your rate: TOU-D-PRIME
Billing period: 10/27/22 to 11/28/22 (33 days)

Delivery charges - Cost to deliver your electricity

Energy-Winter			
Mid peak	77 kWh x \$0.21491		\$16.55
Off peak	97 kWh x \$0.12676		\$12.30
Super off peak	-51 kWh x \$0.12676		-\$6.46

Generation charges - Cost to generate your electricity

SCE			
Energy-Winter			
Mid peak	77 kWh x \$0.25297		\$19.48
Off peak	97 kWh x \$0.06132		\$5.95
Super off peak	-51 kWh x \$0.06132		-\$3.13
Energy Charge Total			\$44.69

Additional
your Net
• Your year
total as of
• Your cur
total: \$44
• Your year
-\$93.07
• Your year

Add Peak Costs to Off-Peak Costs for Each Day



=SUM(K71:L71)

	D	E	F	G	H	I	J	K	L	M	N	O
	kWh From Solar	kWh 2 SCE	Peak?	Home (kWh)	Solar (kWh)	Powerwall (kWh)	Grid (kWh)	Total kWh discrepancy	Total Peak kW discrepancy	Total cost for this billing period		
PM	0	1.59	-	0.14	1.73	0.00	-1.58					
PM	0	1.49	-	0.14	1.63	0.00	-1.49					
PM	0	1.41	-	0.11	1.52	0.00	-1.41					
PM	0	1.28	-	0.11	1.39	0.00	-1.28					
PM	0	1.12	-1.12	0.13	1.25	0.00	-1.13	Total or Off-Peak kWh	Peak kWh			
PM	0	0.97	-0.97	0.13	1.10	0.00	-0.97	-39.99		-4.42	Net Power from Grid (Tesla)	
PM	0	0.85	-0.85	0.10	0.94	0.00	-0.85	-35.64	n.a.		Off Peak Net Power from Grid (SCE)	
PM	0	0.67	-0.67	0.11	0.77	0.00	-0.67	-40.05		-4.41	Net Power from Grid (SCE)	
PM	0	0.46	-0.46	0.13	0.59	0.00	-0.46	0.06		-0.01	Discrepancy (T-SCE)	Approx. Total cost of discrepancy for this day
PM	0	0.29	-0.29	0.13	0.41	0.00	-0.29	\$0.01		-\$0.00	Approx. cost of discrepancy	\$0.01

dollar amount in cell just

Sum All Daily Costs for this Billing Period

Updated file shared
October 11, 2023.



=SUM(O71:O4000)

	D	E	F	G	H	I	J	K	L	M	N
	kWh From	kWh 2 SCE	Peak?	Home (kWh)	Solar (kWh)	Powerwall (kWh)	Grid (kWh)	Total kWh discrepancy	Total Peak kW discrepancy	Total cost for this billing period	
AM	0	0	-	0.12	0.00	0.12	0.00	-844.13	-111.655	-\$190.01	

Note that the kWh numbers remained constant from May 24, 2023
& the dollar amount changed only slightly
(due to correction of an isolated error that I identified)

Original file
Shared
May 24, 2023.

SCE_v_Tesla_Callaway.xlsx - LibreOffice Calc

J	K	L	M	N	O	P
Powerwall (kWh)	Grid (kWh)	Total kWh discrepancy	Total Peak kW discrepancy	Total cost for this billing period		
0.00	0.12	0.00	-844.13	-111.655	-\$183.02	



There is no honest Excuse for
SCE to fail to understand my method of
comparison.

They've had 5+ months* to identify and detail
any errors, yet they have failed to do so.

*Arguably, they've had ***more than a year***, but they showed no interest in my work until after I filed my initial complaint with CPUC.



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It makes use of the works of Mateus Machado Luna.

