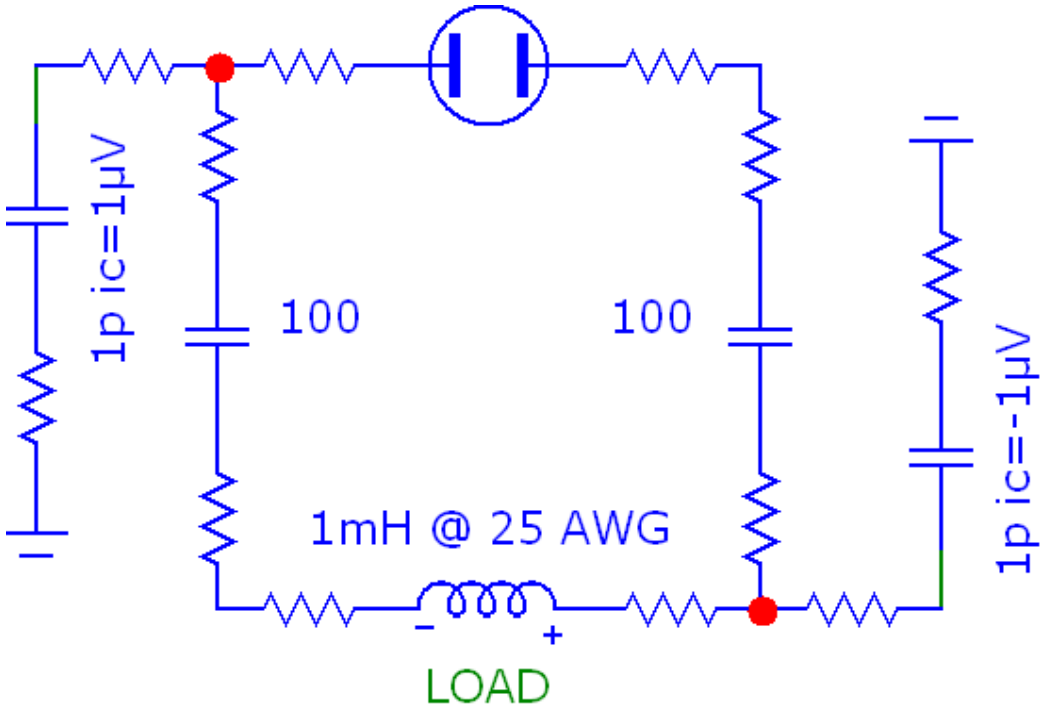
Looking for that Perfect Circuit...!

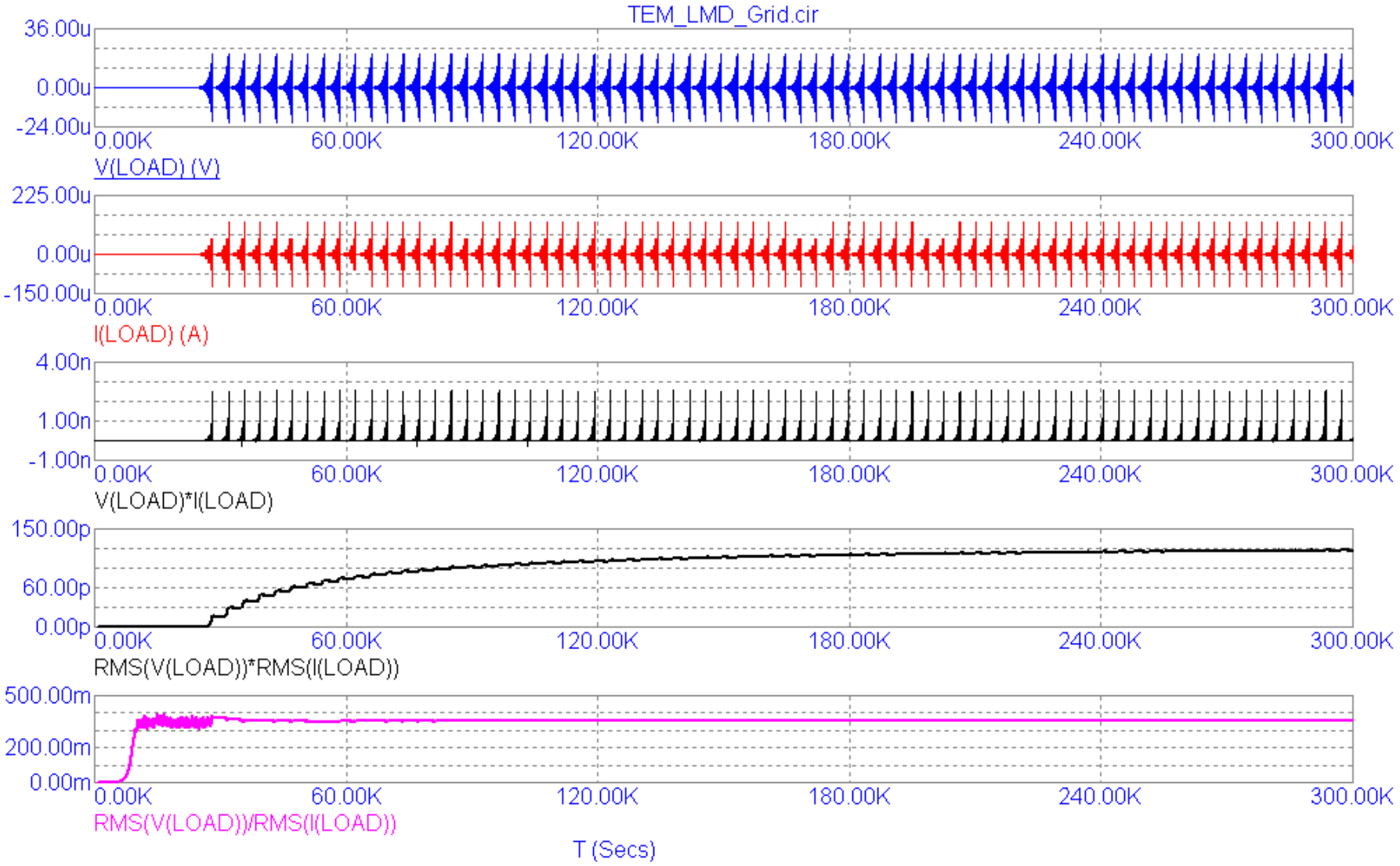
I've done so many circuits which are explosively overunity, or which are difficult – if not impossible – to build, that I thought to myself that a circuit type which I penned back in January of last year, 2021, looked promising in that it was...

1. A modular design capable of being built up with multiple clones of its basic unit-module, and all of its inductive loads are magnetically coupled together to maximize their output. It's also...
2. Practical since it is readily buildable, and...
3. Scalable to increase its output, and...
4. Produces an output of self-regulated pulses of transient surges which periodically collapse (with a consistently well-regulated periodicity) to prevent this circuit's output from reaching into infinite oblivion (which would have destroyed this circuit if left unchecked)..

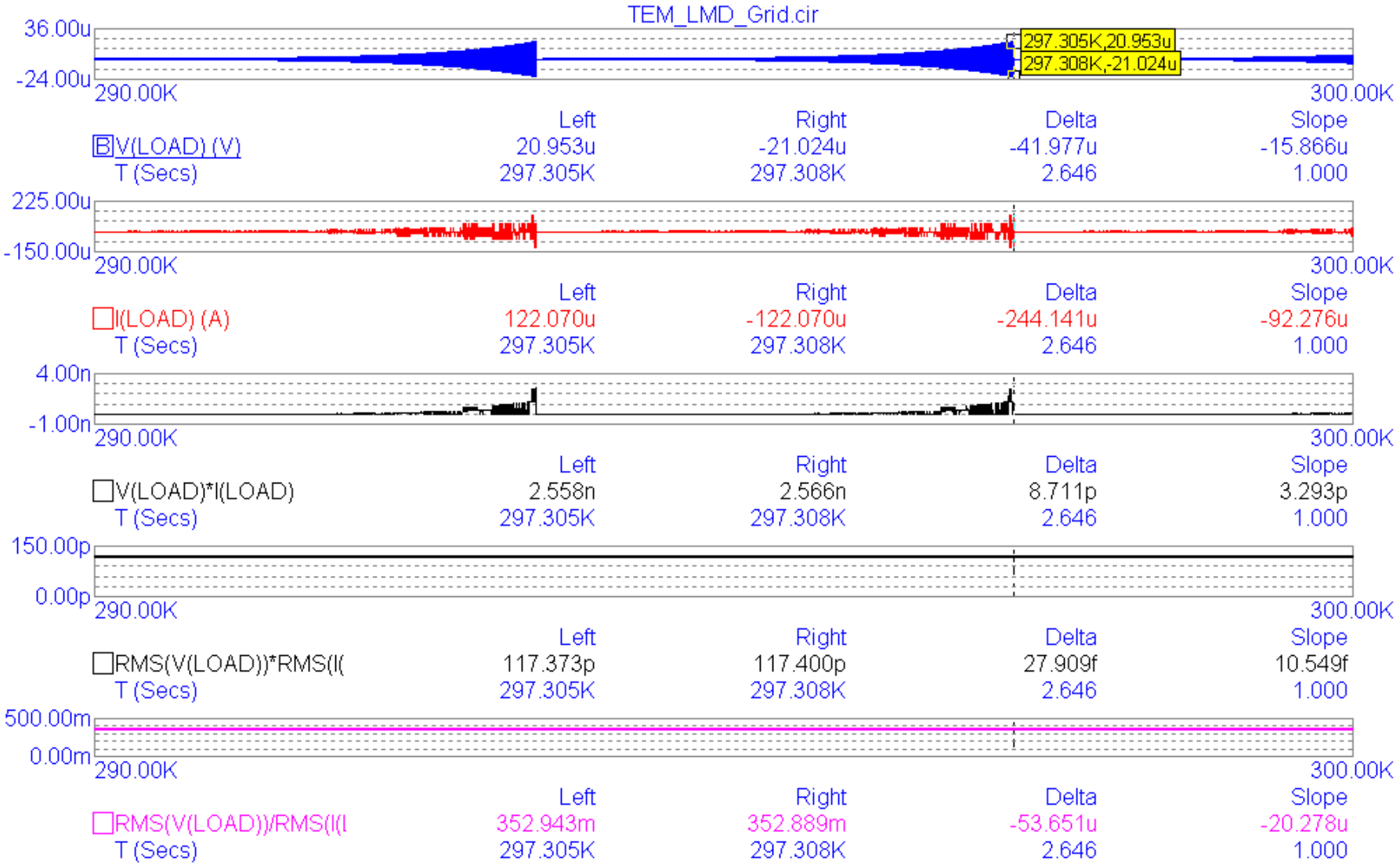


All resistors are 1µ Ohm. All capacitors have 1m Ohm of equivalent series resistance. The parameters of this circuit are optimized for power at the expense of frequency of pulses.

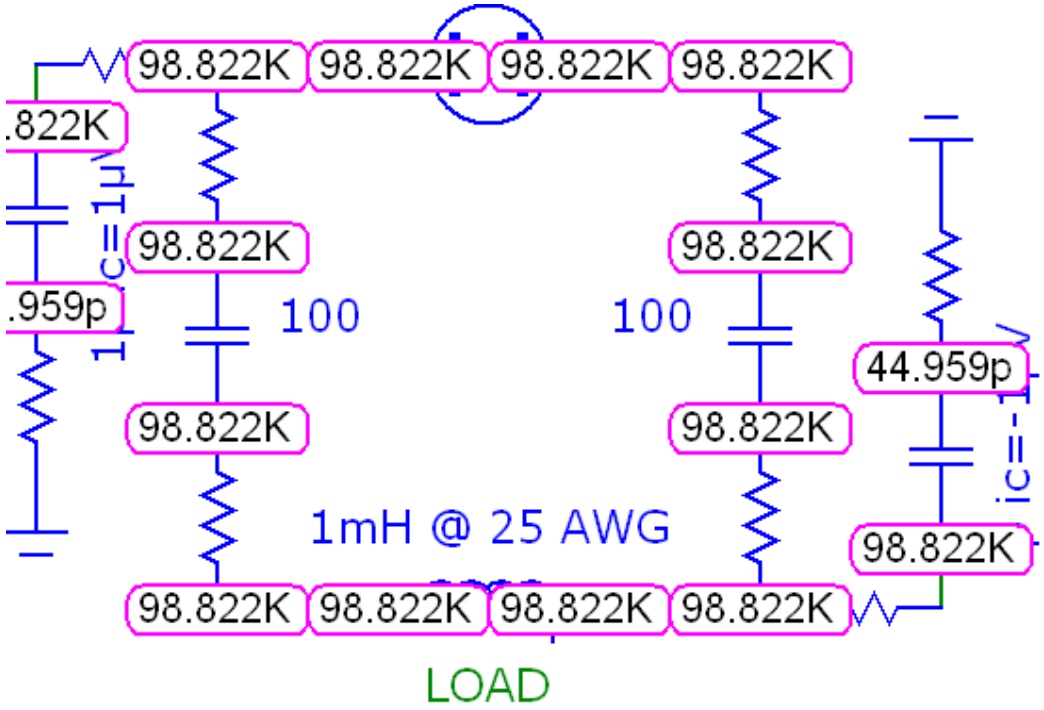
RMS plus raw voltage and current waveforms exhibiting the “classic” shape of a periodically collapsing surge...



Closeup...


TEM_LMD_Grid.cir
36.00u
-24.00u
297.305K,20.953u
297.308K,-21.024u
290.00K
300.00K
Left Right Delta Slope
V(LOAD) (V) 20.953u -21.024u -41.977u -15.866u
T (Secs) 297.305K 297.308K 2.646 1.000
225.00u
-150.00u
290.00K
300.00K
Left Right Delta Slope
I(LOAD) (A) 122.070u -122.070u -244.141u -92.276u
T (Secs) 297.305K 297.308K 2.646 1.000
4.00n
-1.00n
290.00K
300.00K
Left Right Delta Slope
V(LOAD)*I(LOAD) 2.558n 2.566n 8.711p 3.293p
T (Secs) 297.305K 297.308K 2.646 1.000
150.00p
0.00p
290.00K
300.00K
Left Right Delta Slope
RMS(V(LOAD))*RMS(I(117.373p 117.400p 27.909f 10.549f
T (Secs) 297.305K 297.308K 2.646 1.000
500.00m
0.00m
290.00K
300.00K
Left Right Delta Slope
RMS(V(LOAD))/RMS(I(I 352.943m 352.889m -53.651u -20.278u
T (Secs) 297.305K 297.308K 2.646 1.000

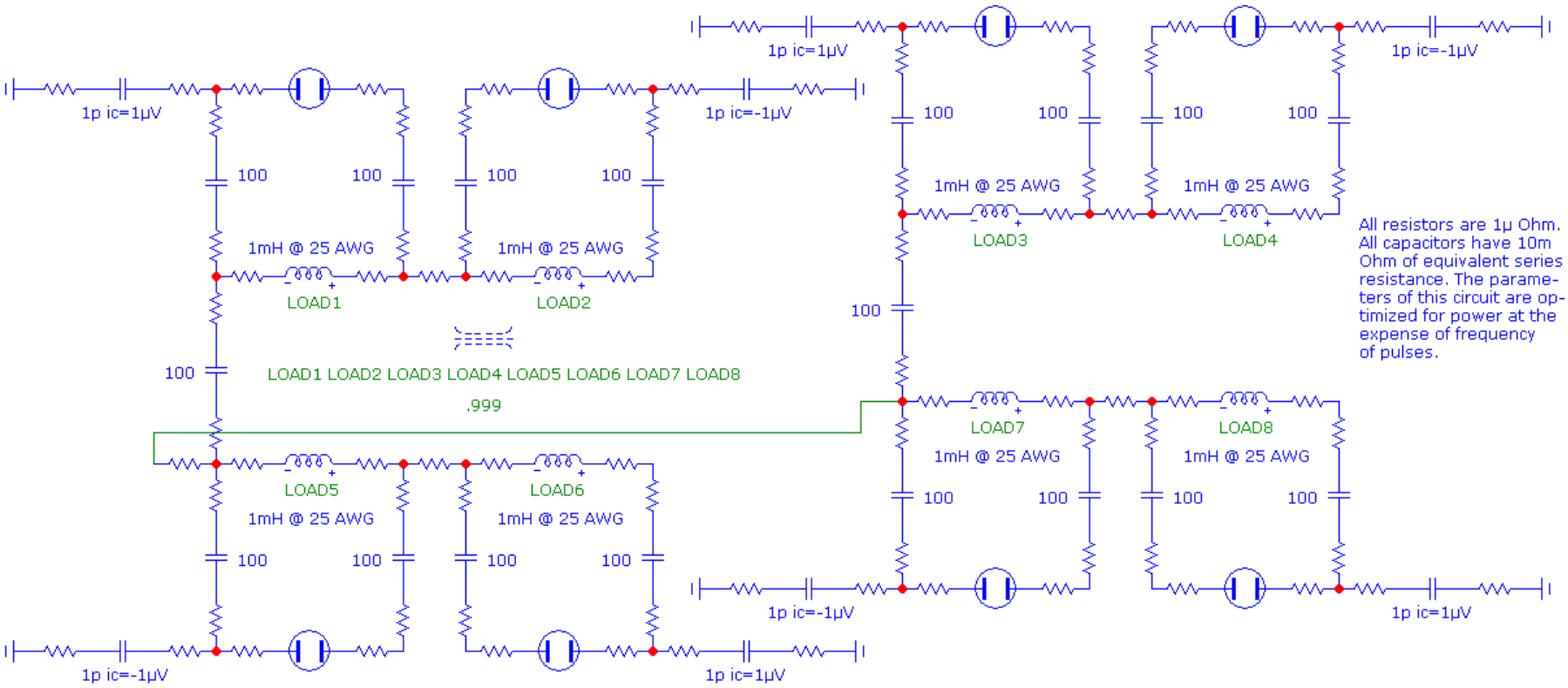
Nodal voltages after 300k seconds of simulator run-time...



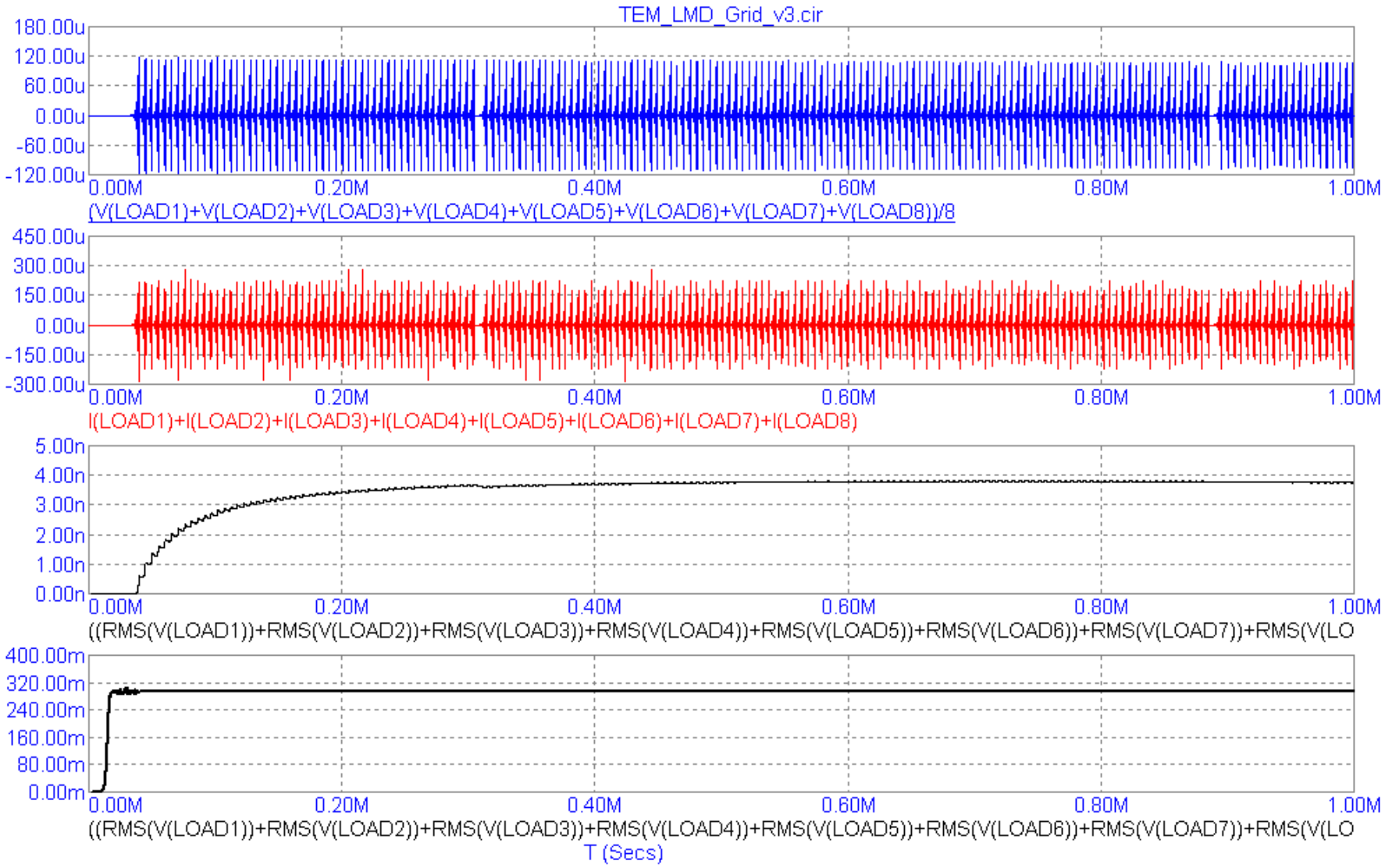
All resistors are 1µ Ohm. All capacitors have 1m Ohm of equivalent series resistance. The parameters of this circuit are optimized for power at the expense of frequency of pulses.

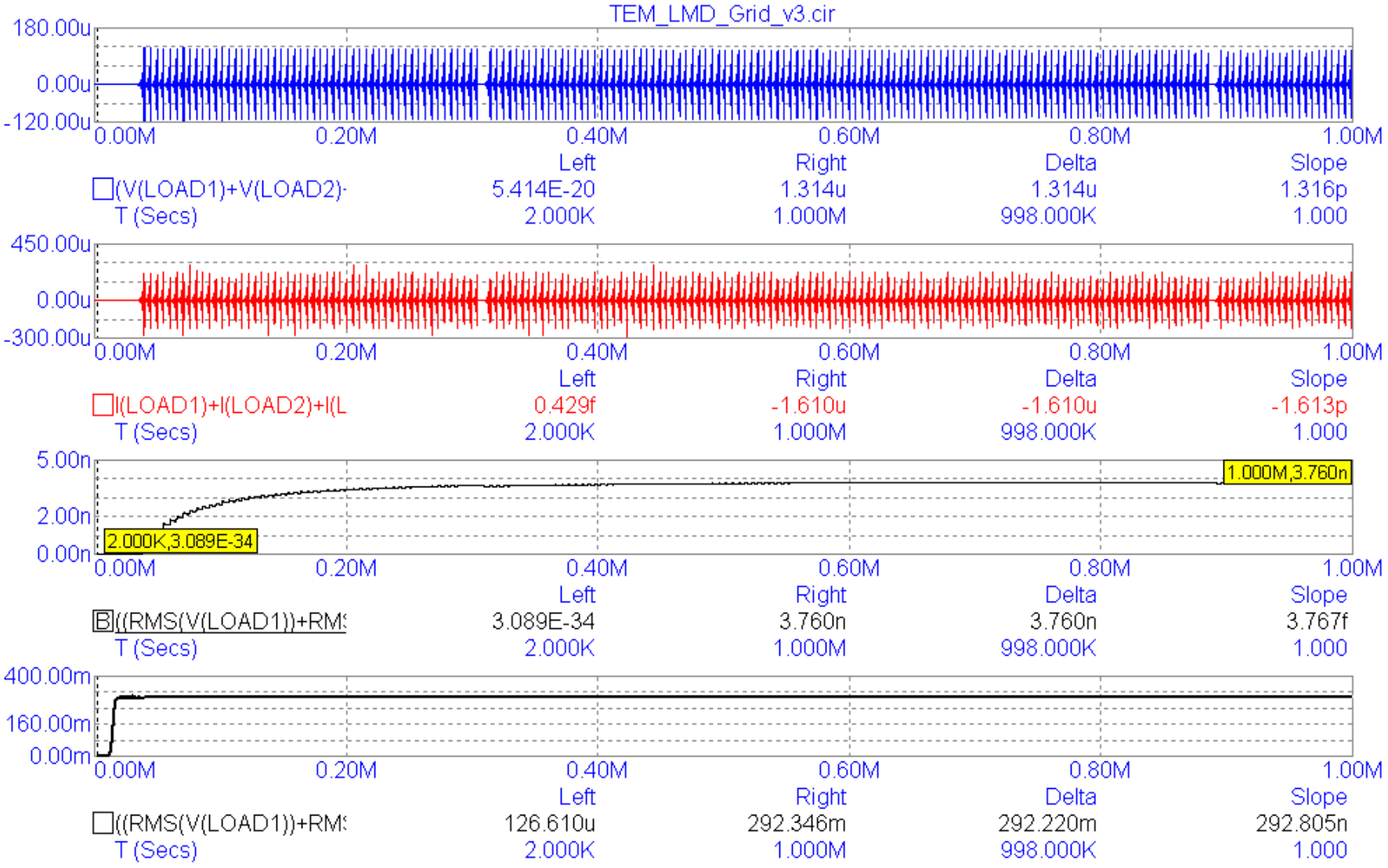
All of this is very interesting (to me anyway) since it's so simple and (thereby) elegant in its design. How could it *not* be buildable?

Moving on to assembling this module into a group of four and doubling them...

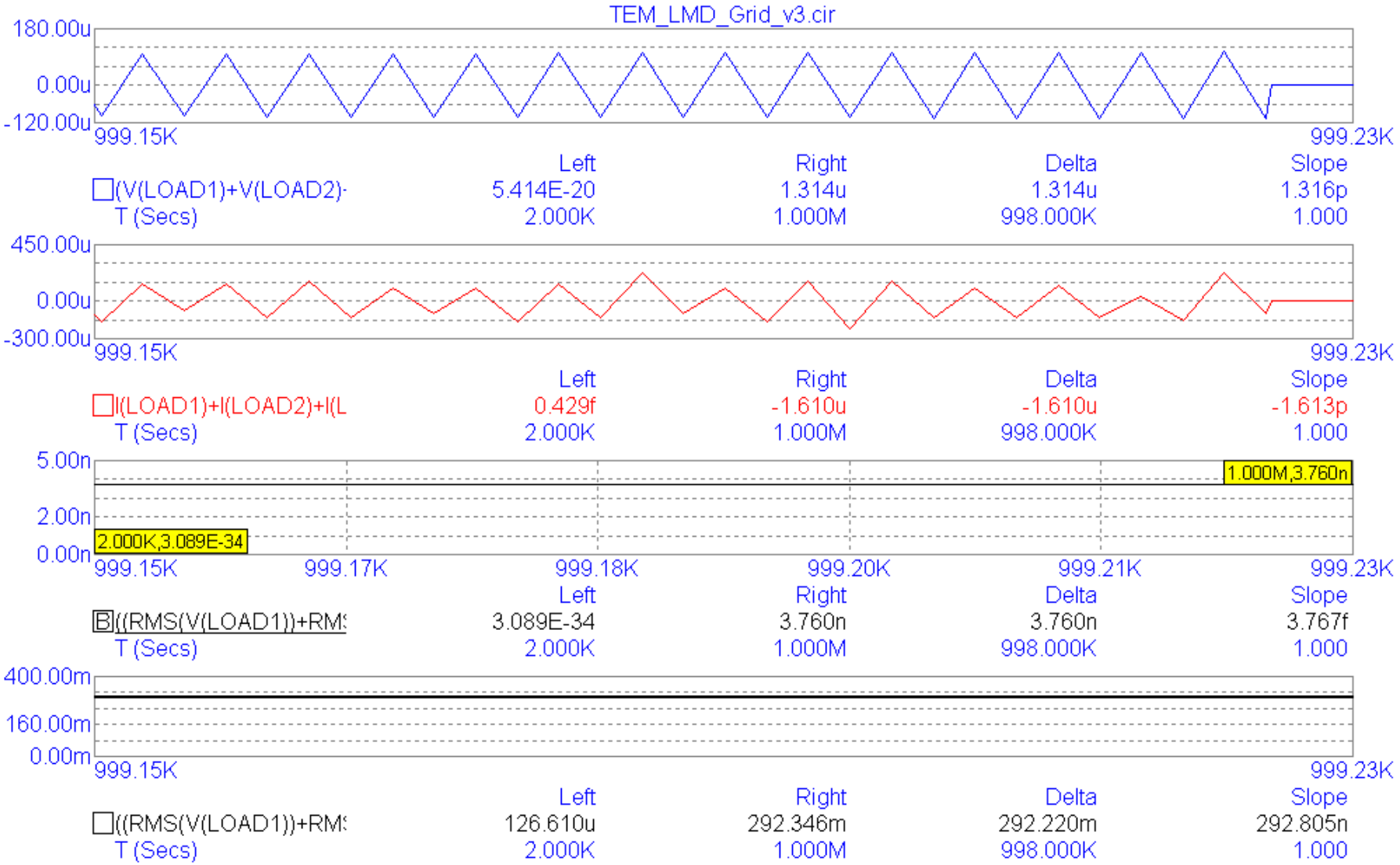


Raw and RMS outputs of all of its eight magnetically coupled inductive LOADs plus a look at the RMS impedance of its wattage after a million seconds of simulator run-time. The load voltages have been averaged among its eight coils while the current has been summed up...

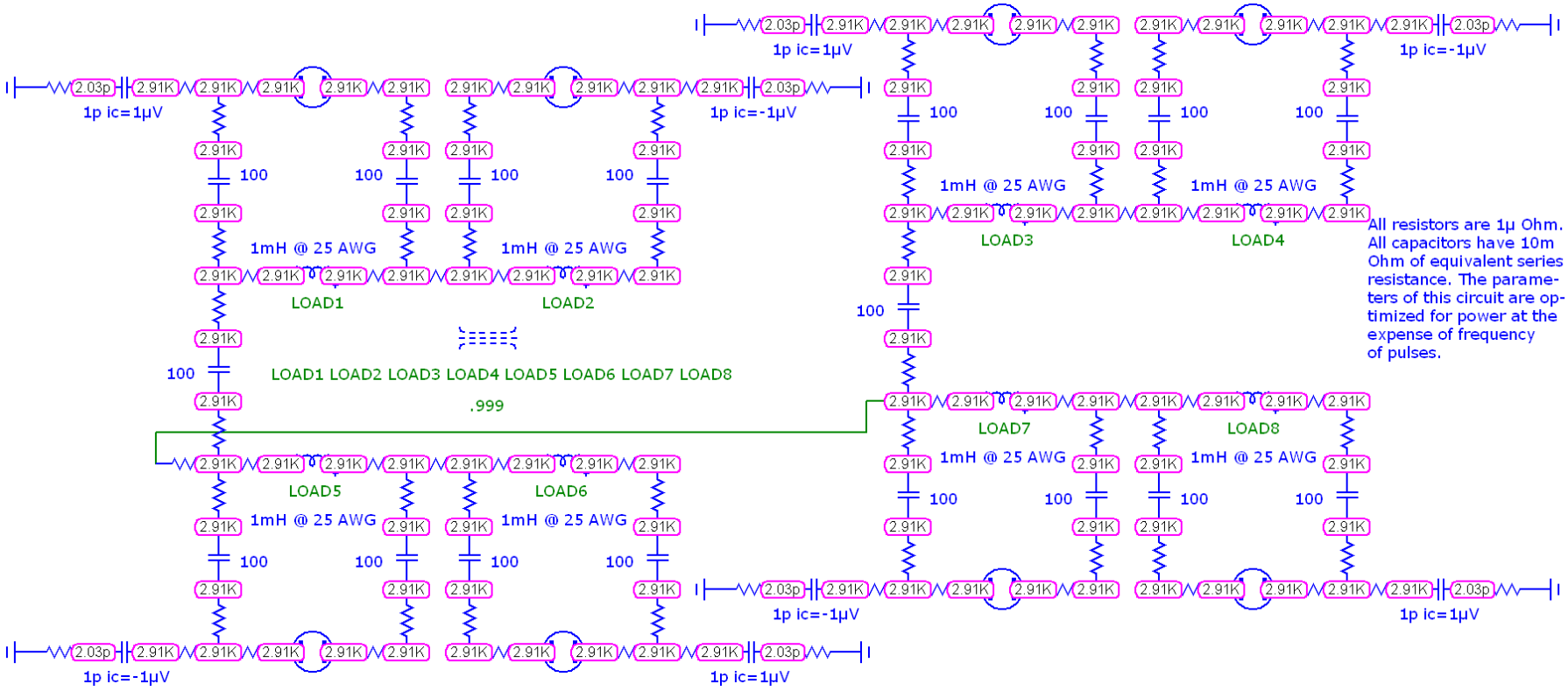



TEM_LMD_Grid_v3.cir
180.00u
0.00u
-120.00u
0.00M
0.20M
0.40M
0.60M
0.80M
1.00M
Left
Right
Delta
Slope
(V(LOAD1)+V(LOAD2)-
5.414E-20
1.314u
1.314u
1.316p
T (Secs)
2.000K
1.000M
998.000K
1.000
450.00u
0.00u
-300.00u
I(LOAD1)+I(LOAD2)+I(L
0.429f
-1.610u
-1.610u
-1.613p
5.00n
2.00n
0.00n
1.000M,3.760n
2.000K,3.089E-34
((RMS(V(LOAD1))+RM
3.089E-34
3.760n
3.760n
3.767f
400.00m
160.00m
0.00m
126.610u
292.346m
292.220m
292.805n

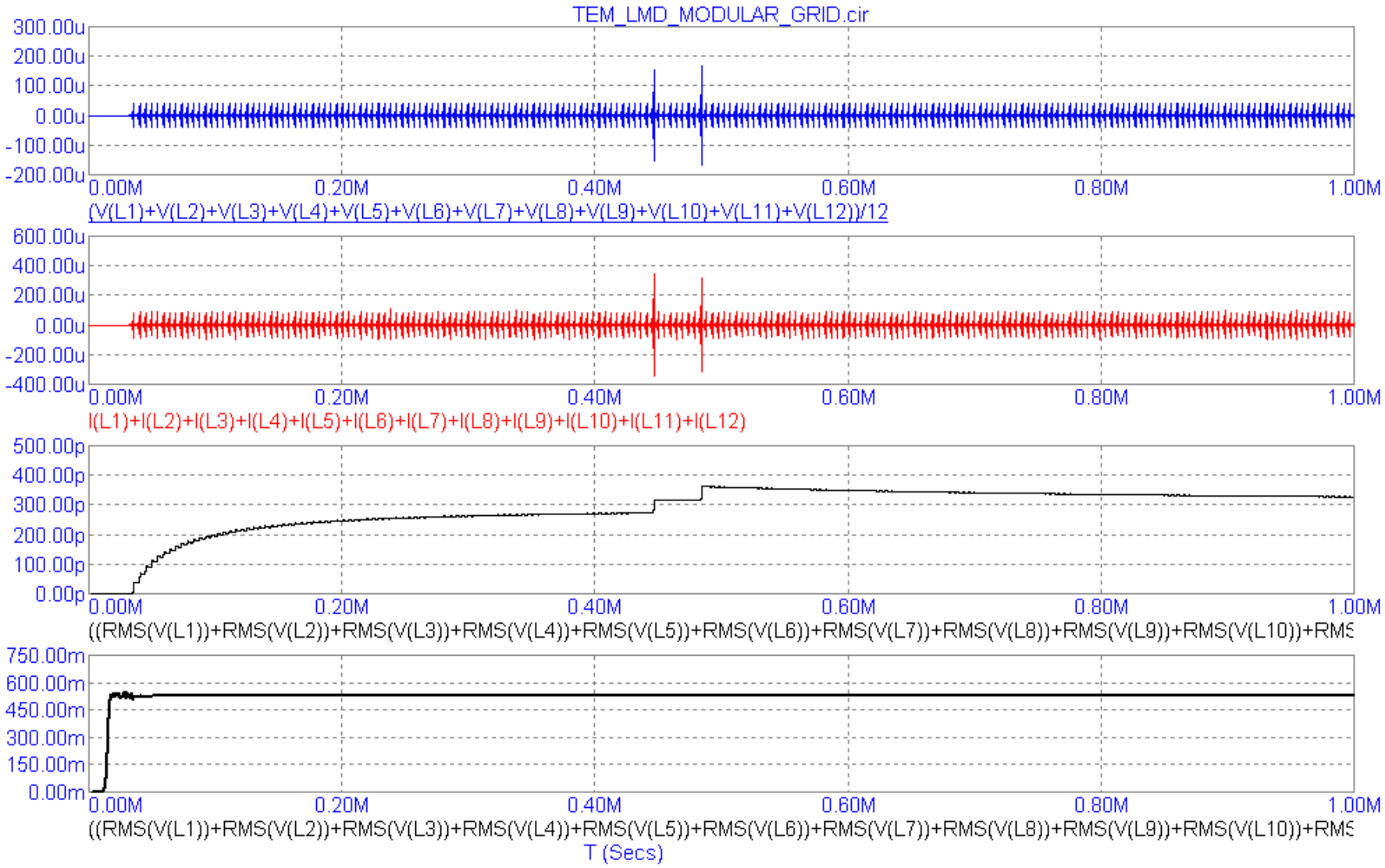
A closeup view shows the lack of saturation of current within the inductive LOADs...



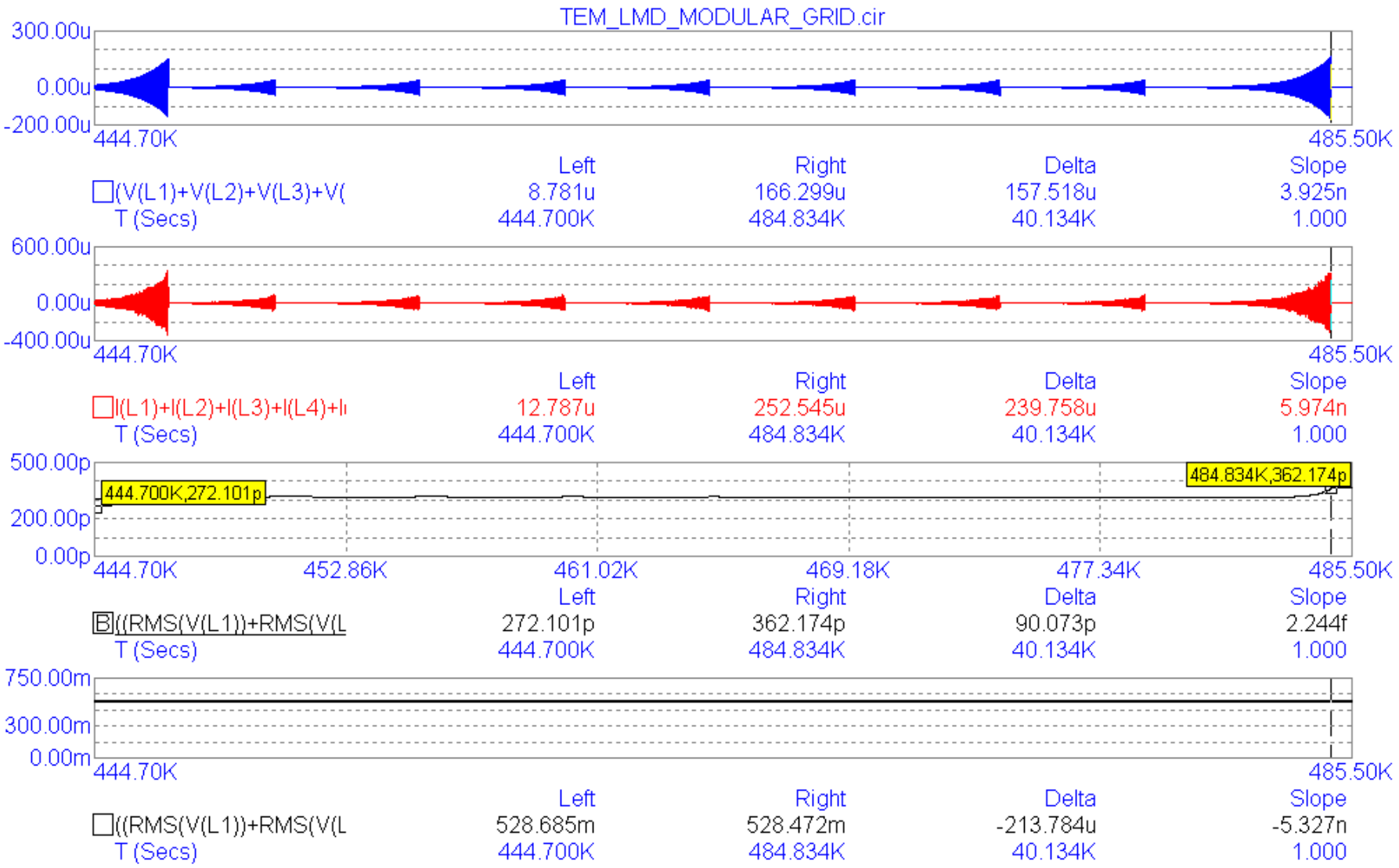
Nodal voltages...



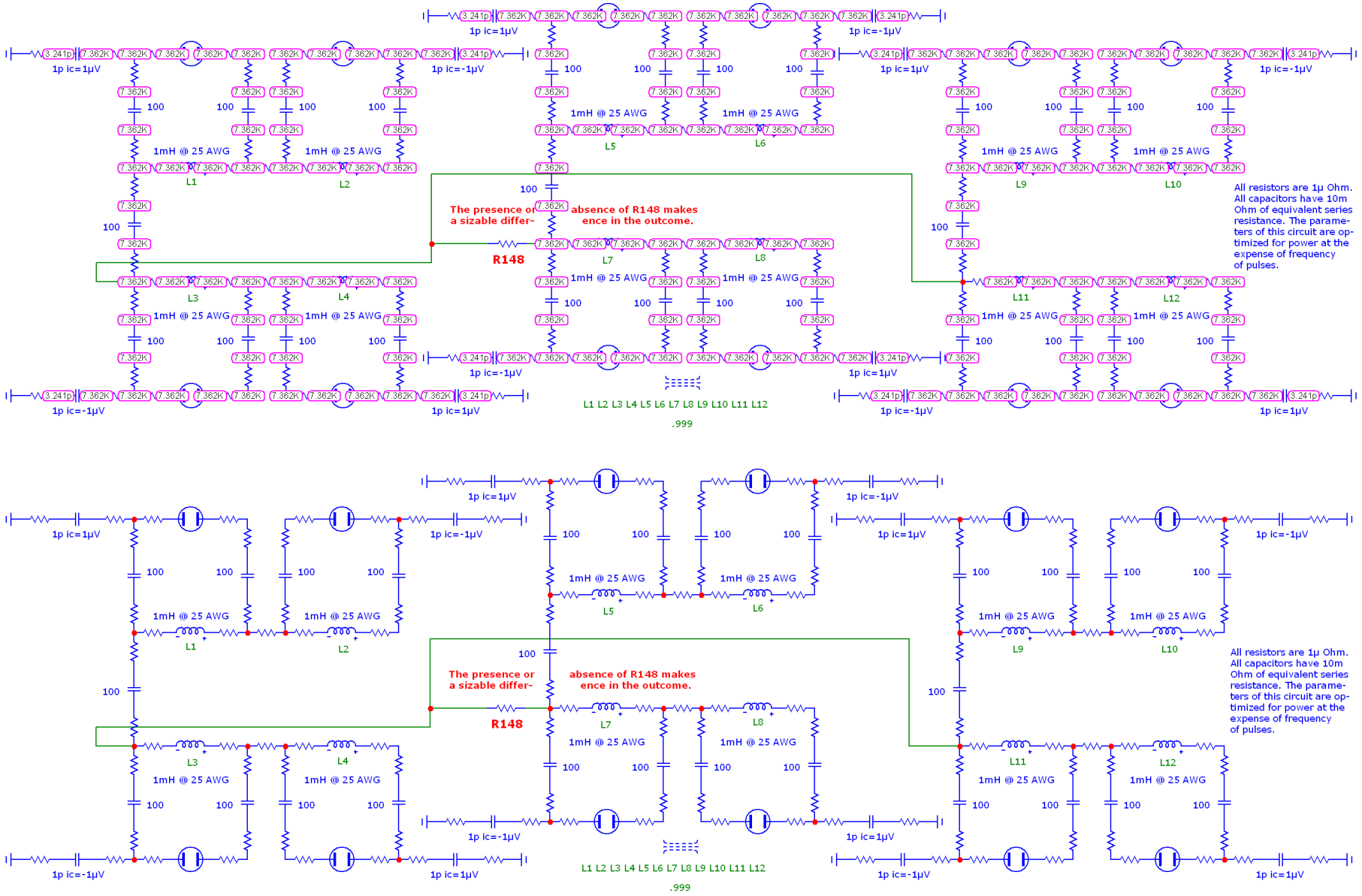
Twelve modules gives a slight improvement of output. This is to be expected since the number of modules has been increased by a mere factor of 50%...



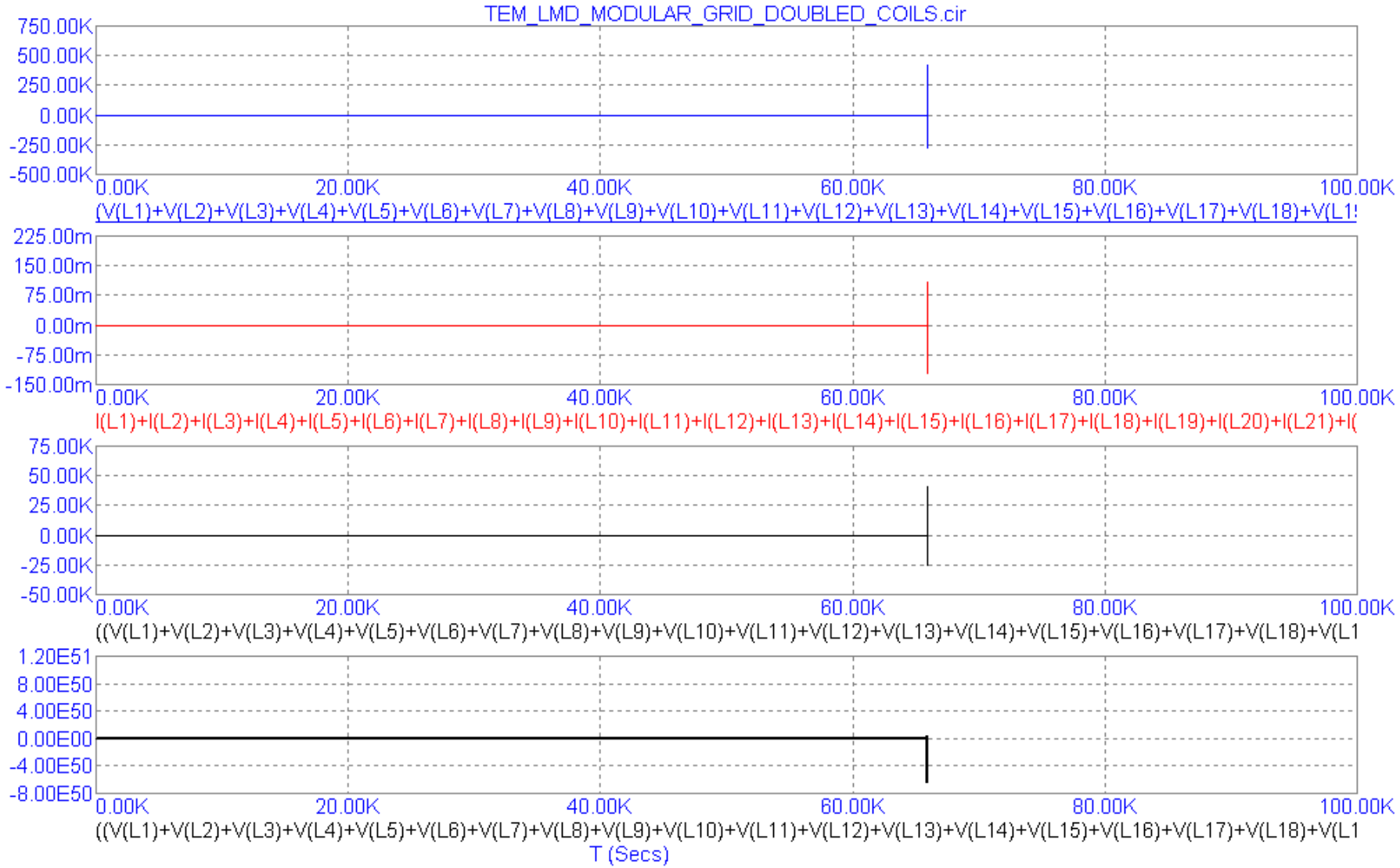
Closeup...

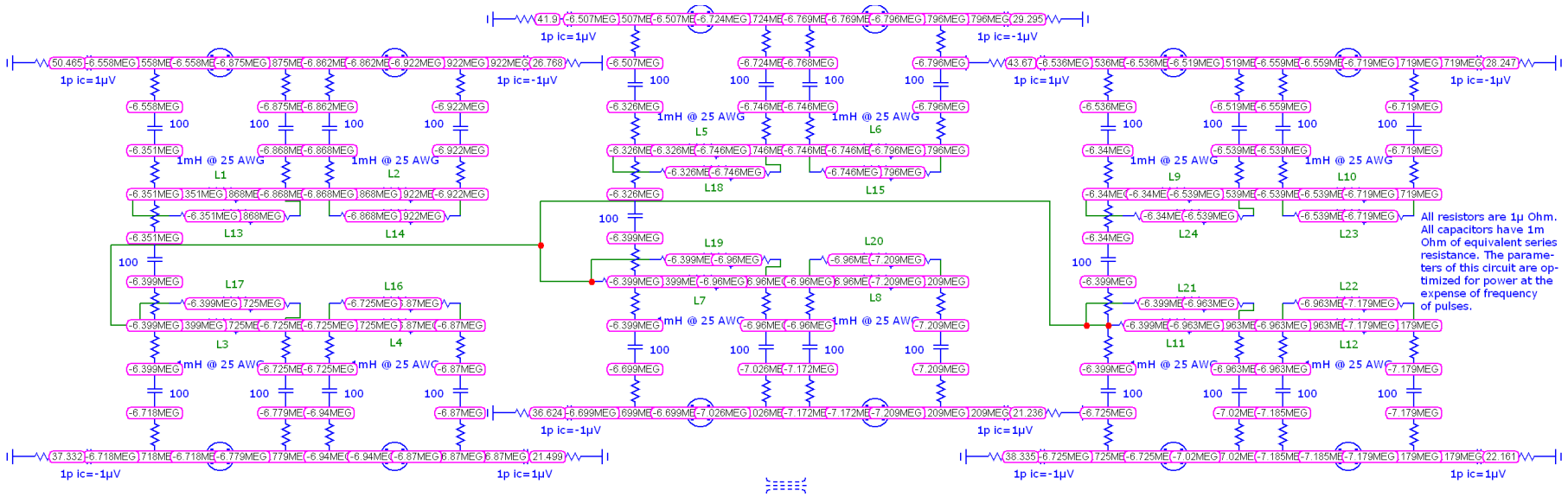

TEM_LMD_MODULAR_GRID.cir
300.00u
0.00u
-200.00u
444.70K
485.50K
Left Right Delta Slope
(V(L1)+V(L2)+V(L3)+V(
8.781u 166.299u 157.518u 3.925n
T (Secs)
444.700K 484.834K 40.134K 1.000
600.00u
0.00u
-400.00u
444.70K
485.50K
Left Right Delta Slope
I(L1)+I(L2)+I(L3)+I(L4)+I
12.787u 252.545u 239.758u 5.974n
T (Secs)
444.700K 484.834K 40.134K 1.000
500.00p
200.00p
0.00p
444.700K,272.101p
484.834K,362.174p
444.70K
452.86K
461.02K
469.18K
477.34K
485.50K
Left Right Delta Slope
((RMS(V(L1))+RMS(V(L
272.101p 362.174p 90.073p 2.244f
T (Secs)
444.700K 484.834K 40.134K 1.000
750.00m
300.00m
0.00m
444.70K
485.50K
Left Right Delta Slope
((RMS(V(L1))+RMS(V(L
528.685m 528.472m -213.784u -5.327n
T (Secs)
444.700K 484.834K 40.134K 1.000

Nodal voltages...



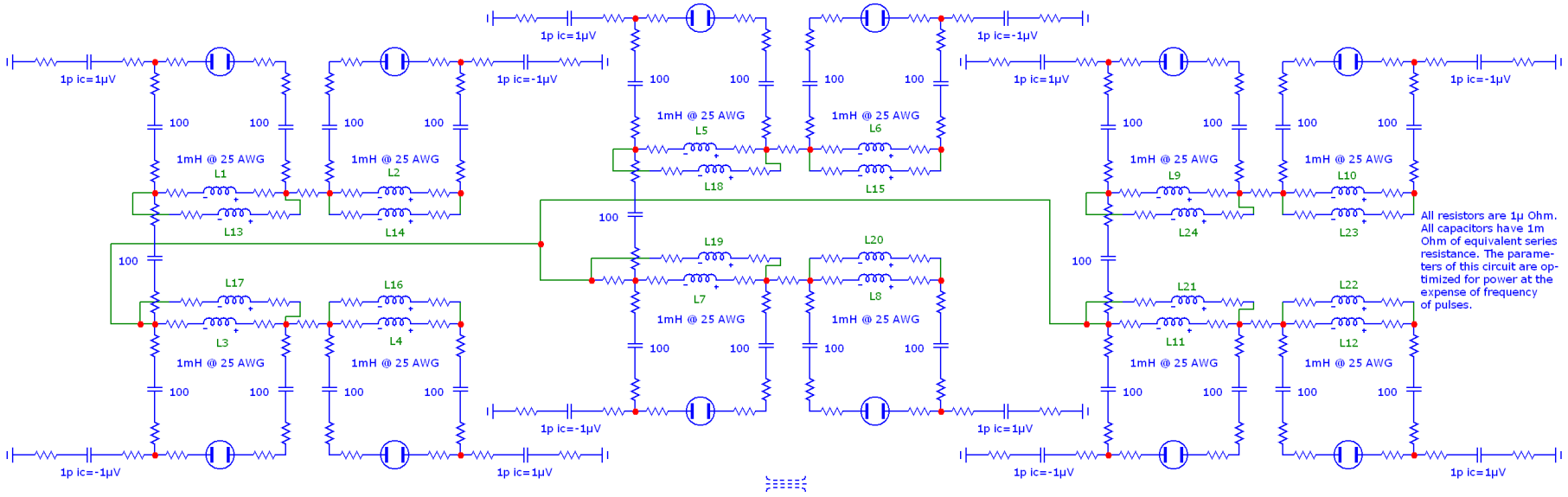
Lest anyone get a silly idea that this is not impressive, then please have a look at one of several *wrong* arrangements of assembling these modules which has the impact of destroying the delicate balance between this circuit becoming comatose versus exploding with ridiculous ferocity of output. The moral of this particular *error of design* is that: “greed and impatience do not <u>always</u> pay off”...





L1 L2 L3 L4 L5 L6 L7 L8 L9 L10 L11 L12 L13 L14 L15 L16 L17 L18 L19 L20 L21 L22 L23 L24

.999

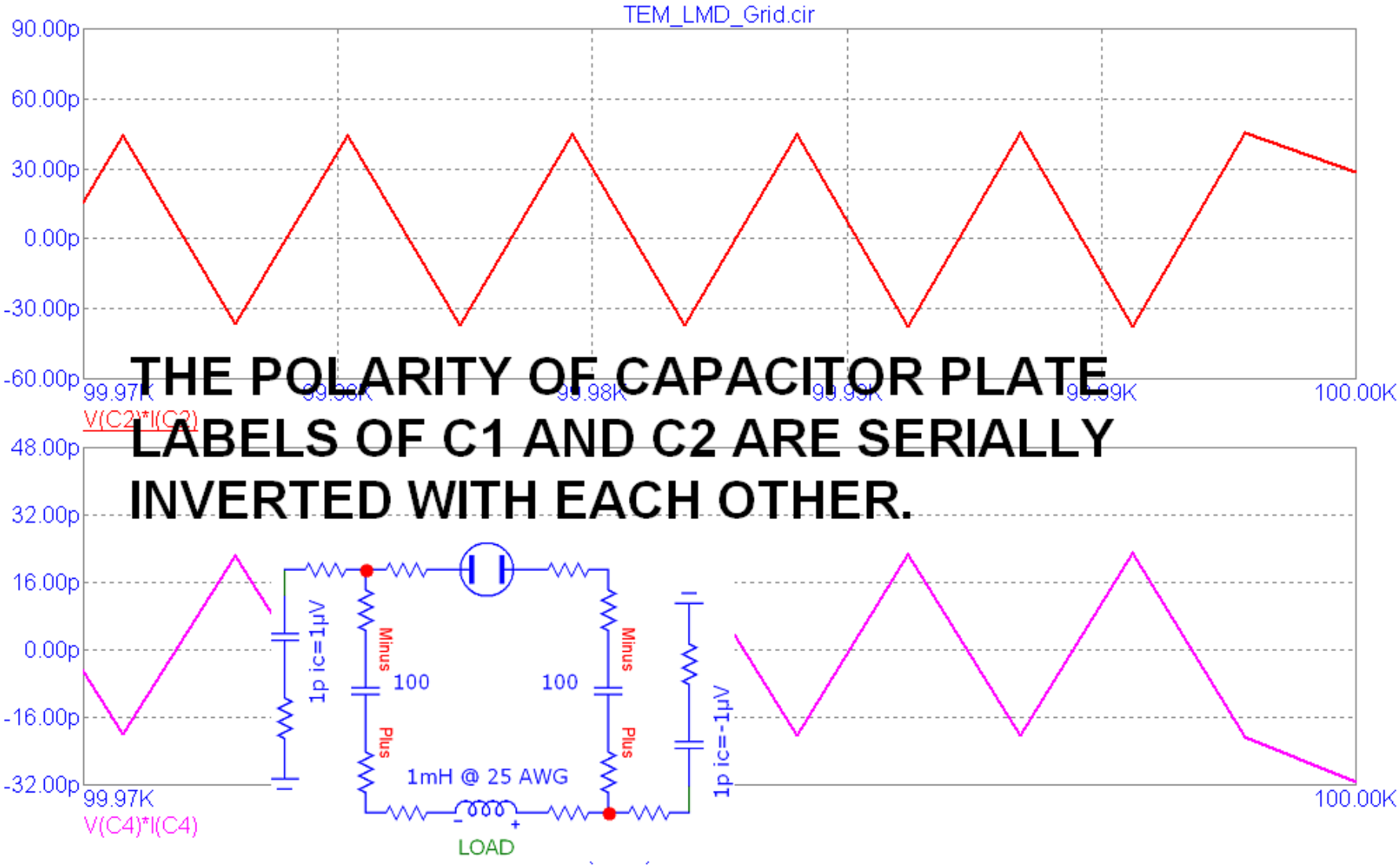


L1 L2 L3 L4 L5 L6 L7 L8 L9 L10 L11 L12 L13 L14 L15 L16 L17 L18 L19 L20 L21 L22 L23 L24

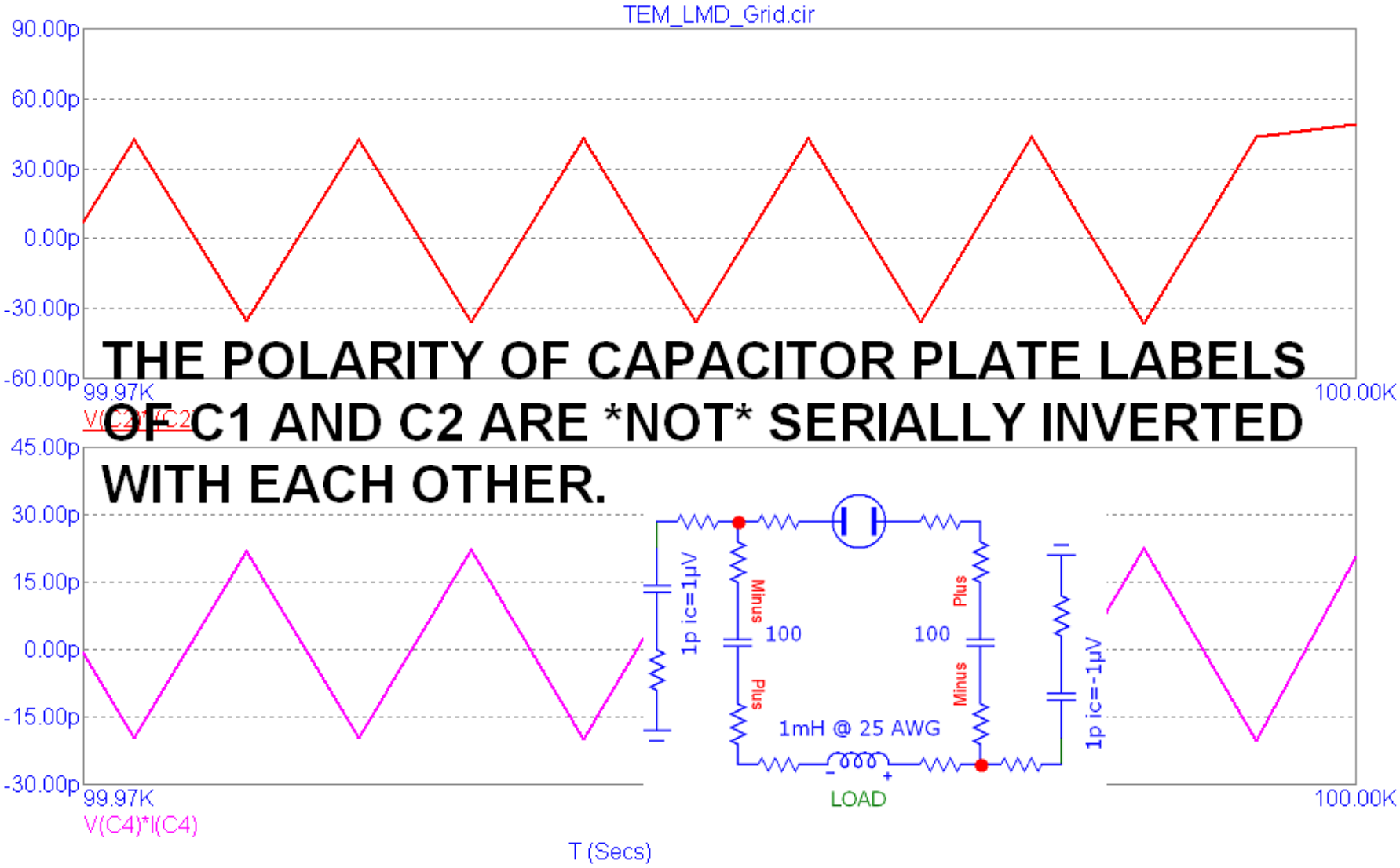
.999

Where's the Extra Power Coming From?

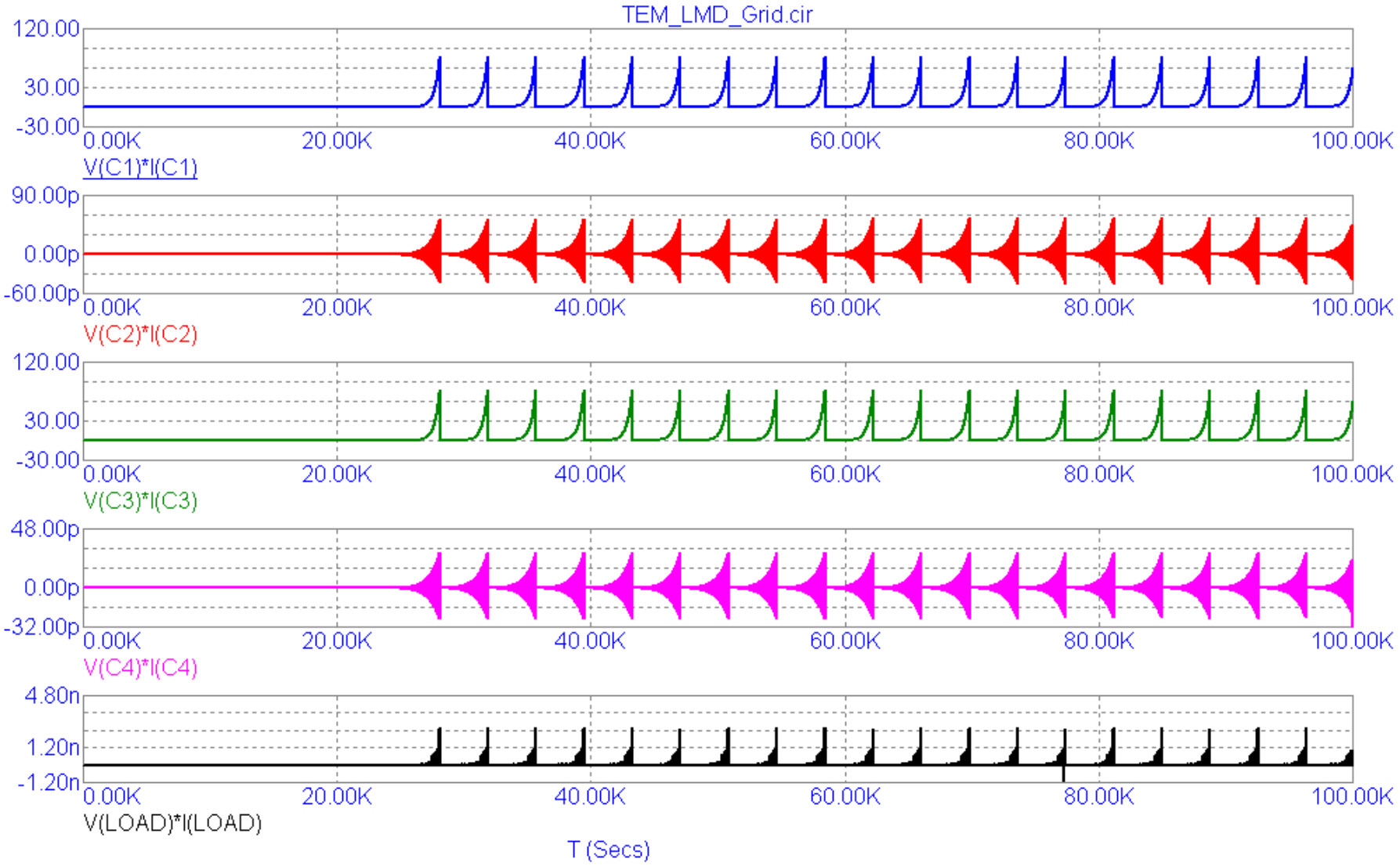
It may be coming from either one of capacitors, C2 or C4, since at least one of them is exhibiting negative wattage...?



...despite any possible arrangement of the plate labels of these two capacitors...?

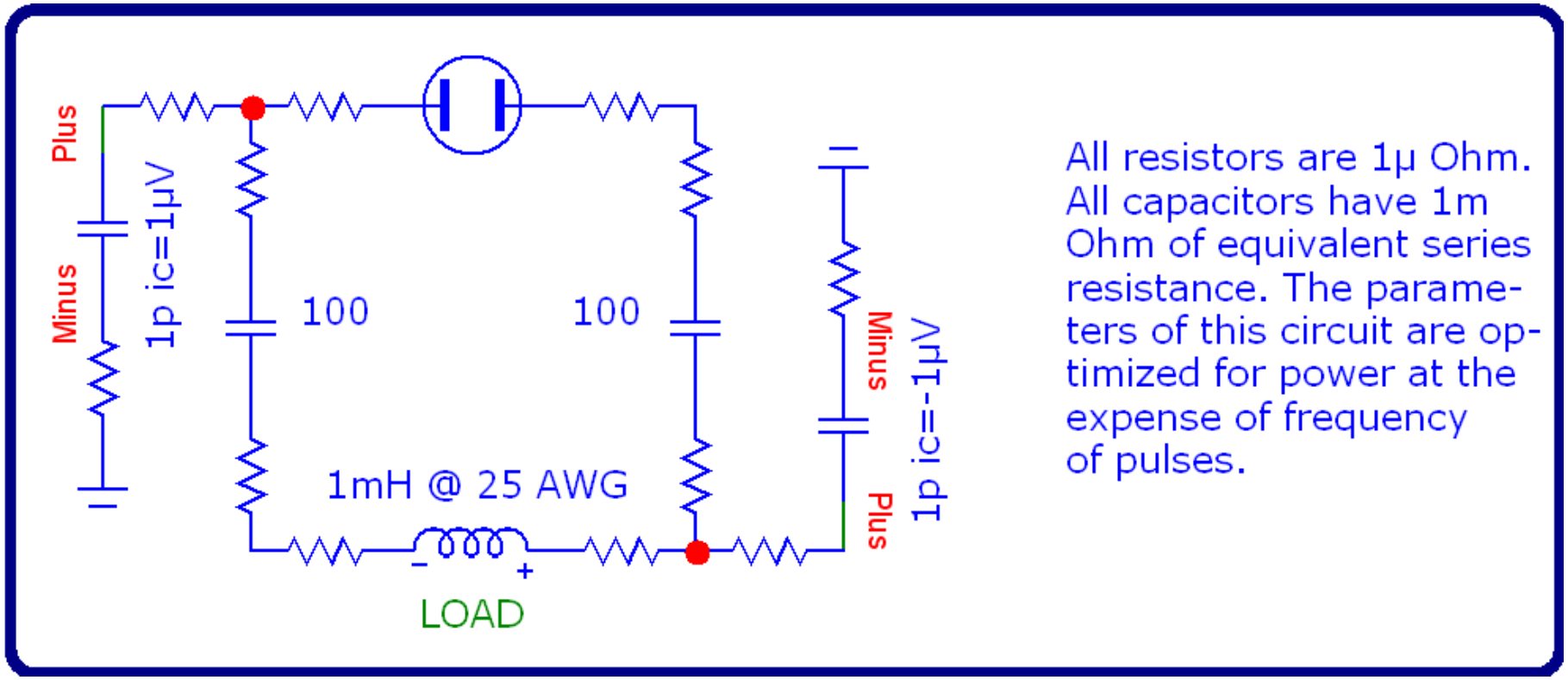


...and despite their outputs are less than the outputs of capacitors, C1 and C3, who are consuming a greater quantity of positive watts...?

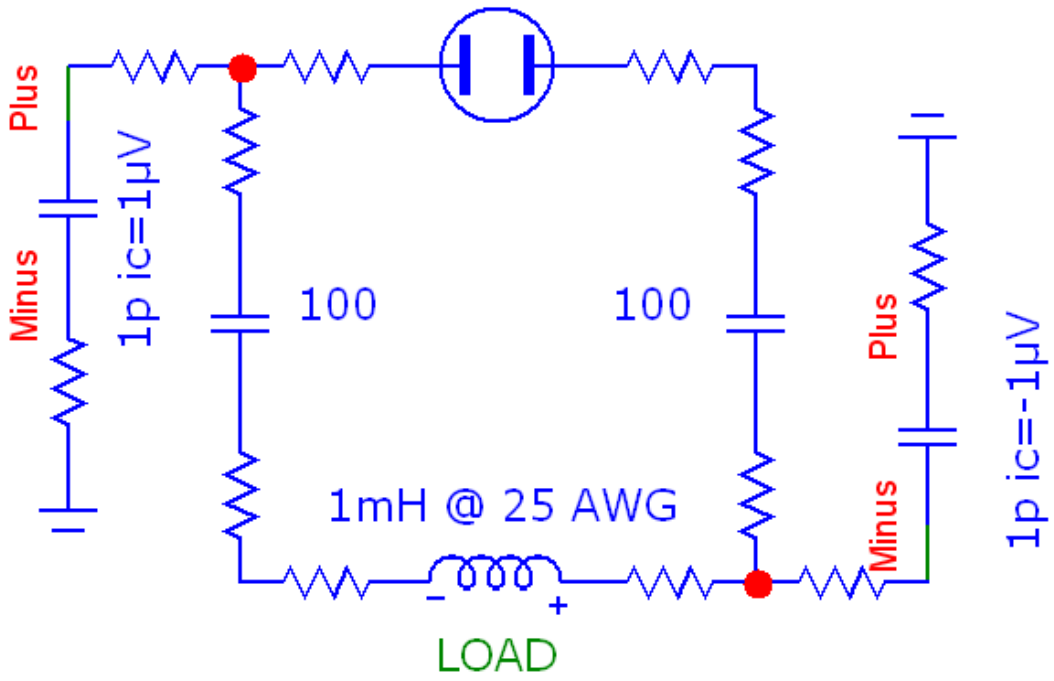


Maybe capacitors, C1 and C3, are to blame since they are accumulating a significant quantity of power while the scant negative wattage of capacitors, C2 and C4, plus the neon bulb's macro resistor, R3, are providing a very important SIGNAL of negative wattage? I don't know...

In the original schematic...

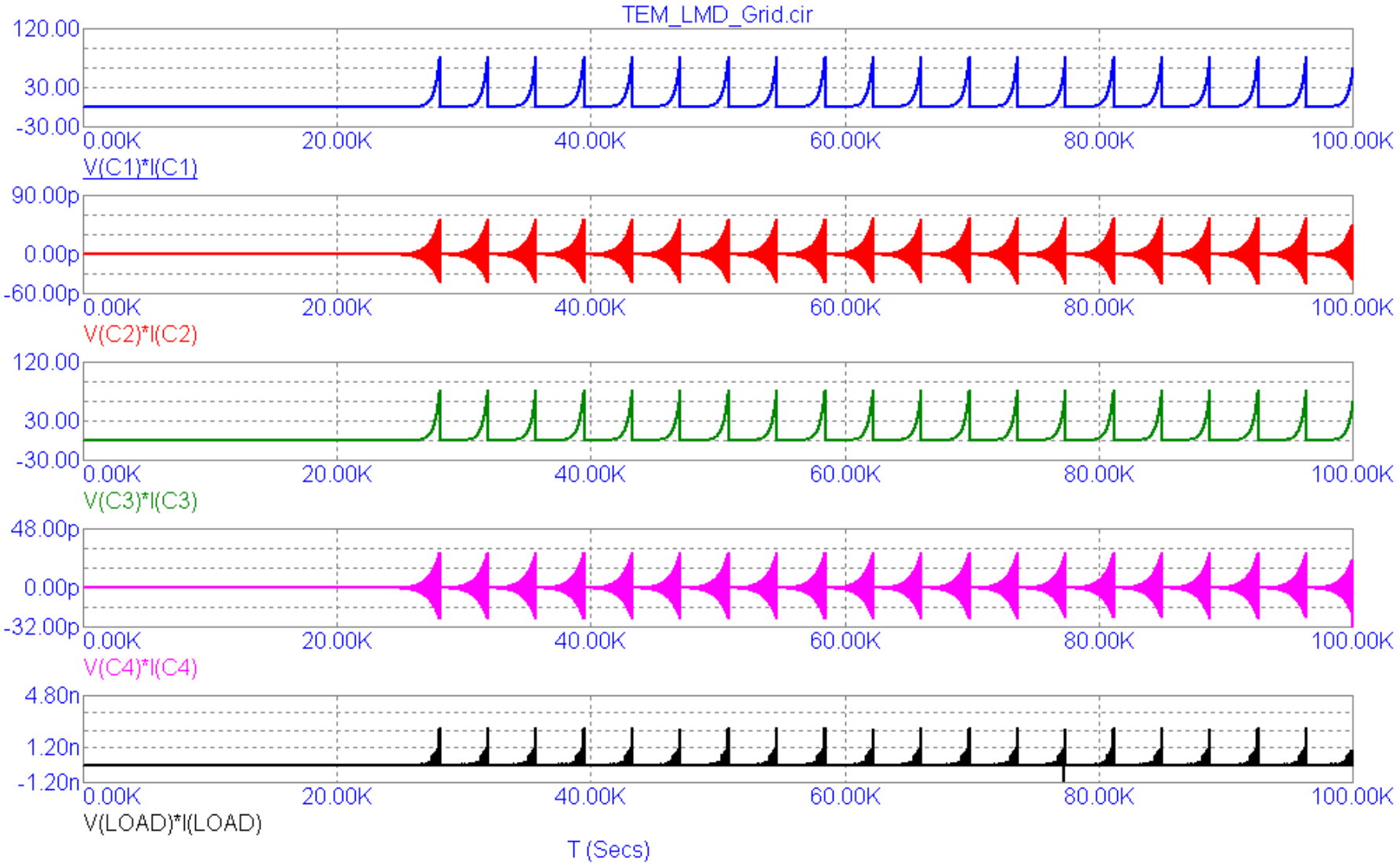


...if capacitor, C3, is turned around facing the opposite way (with inverted terminals),...

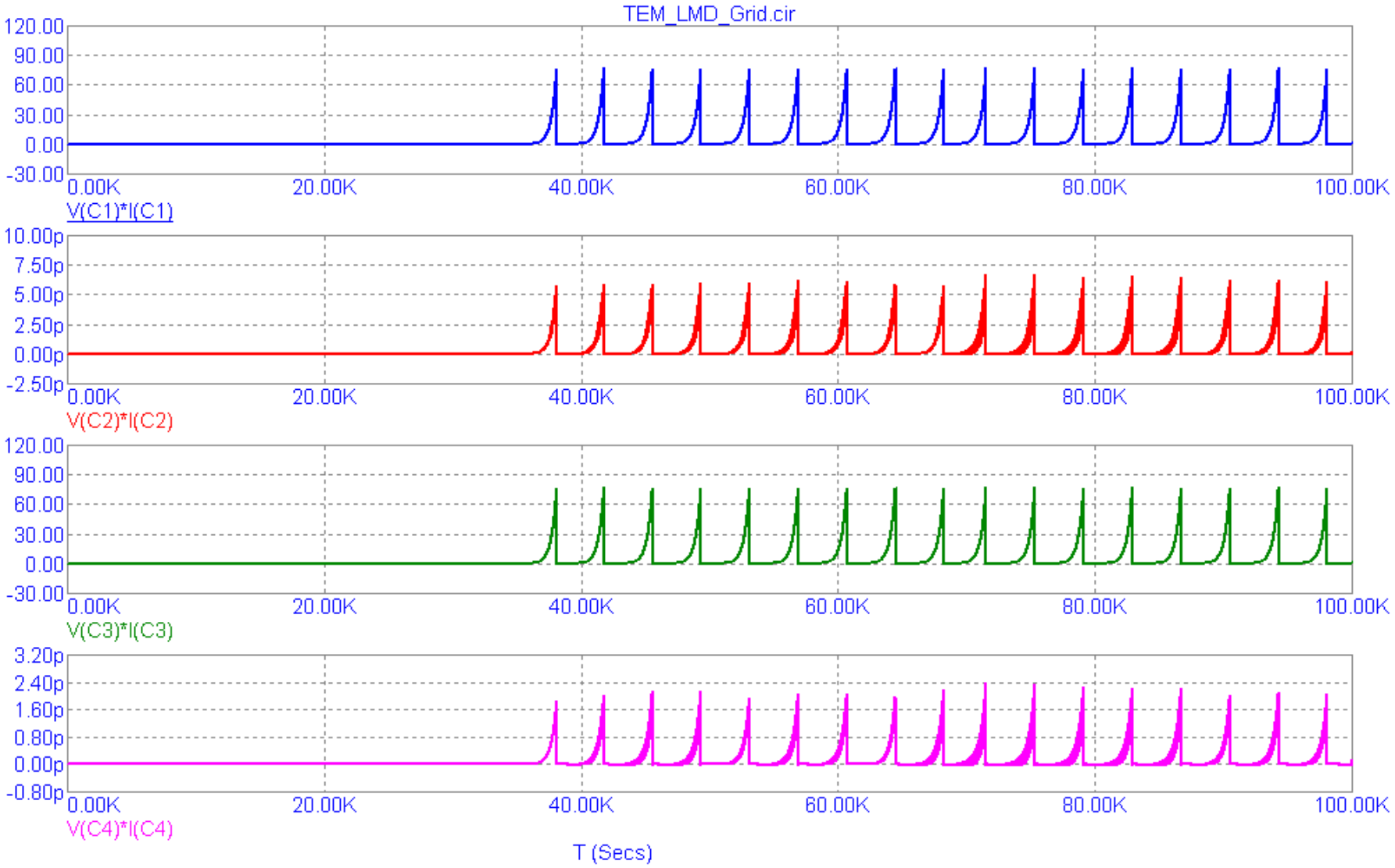


All resistors are 1µ Ohm. All capacitors have 1m Ohm of equivalent series resistance. The parameters of this circuit are optimized for power at the expense of frequency of pulses.

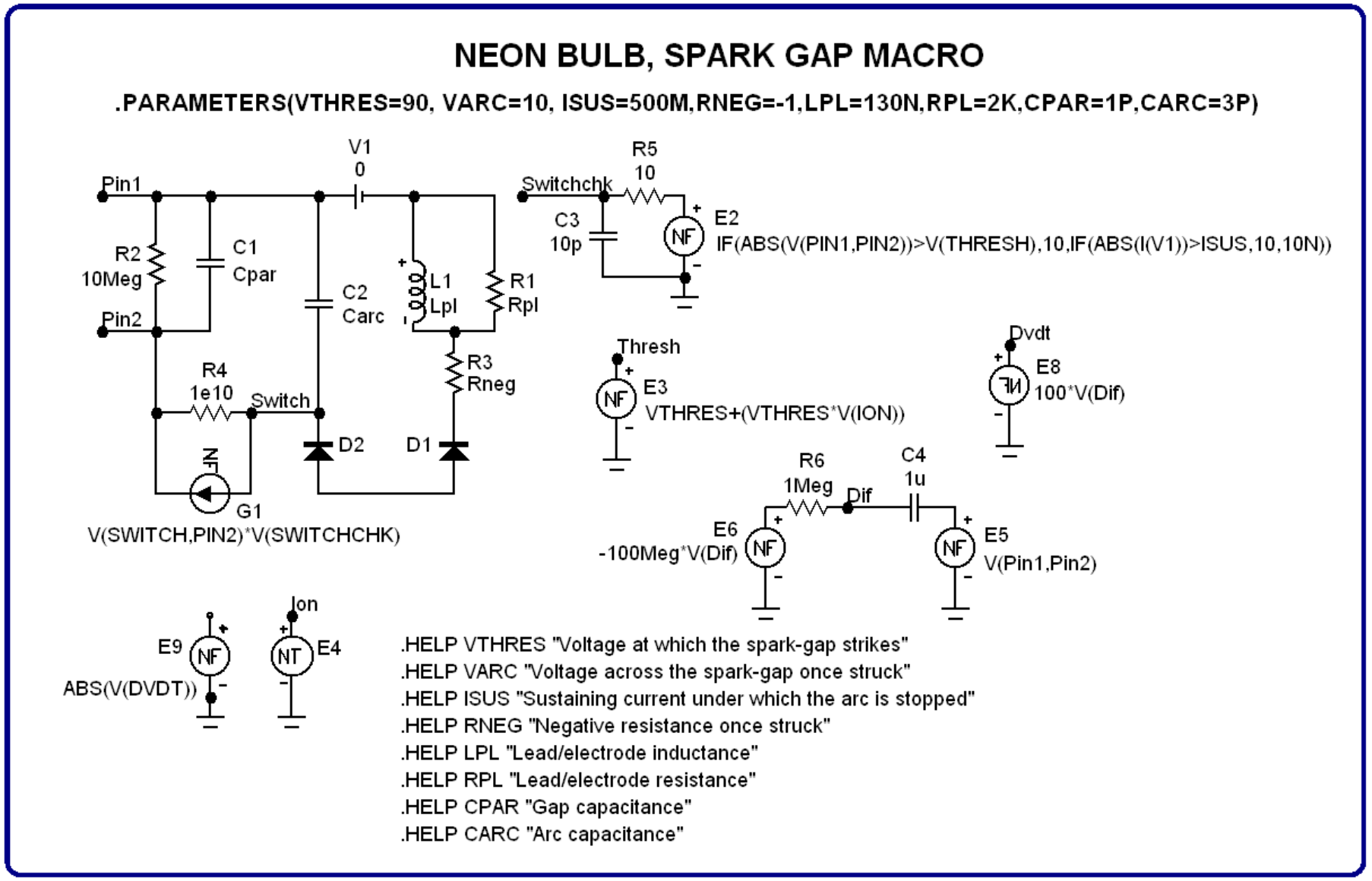
...then both capacitors, C2 and C4, no longer put out a wedgie waveform which alternates with positive and negative polarity...



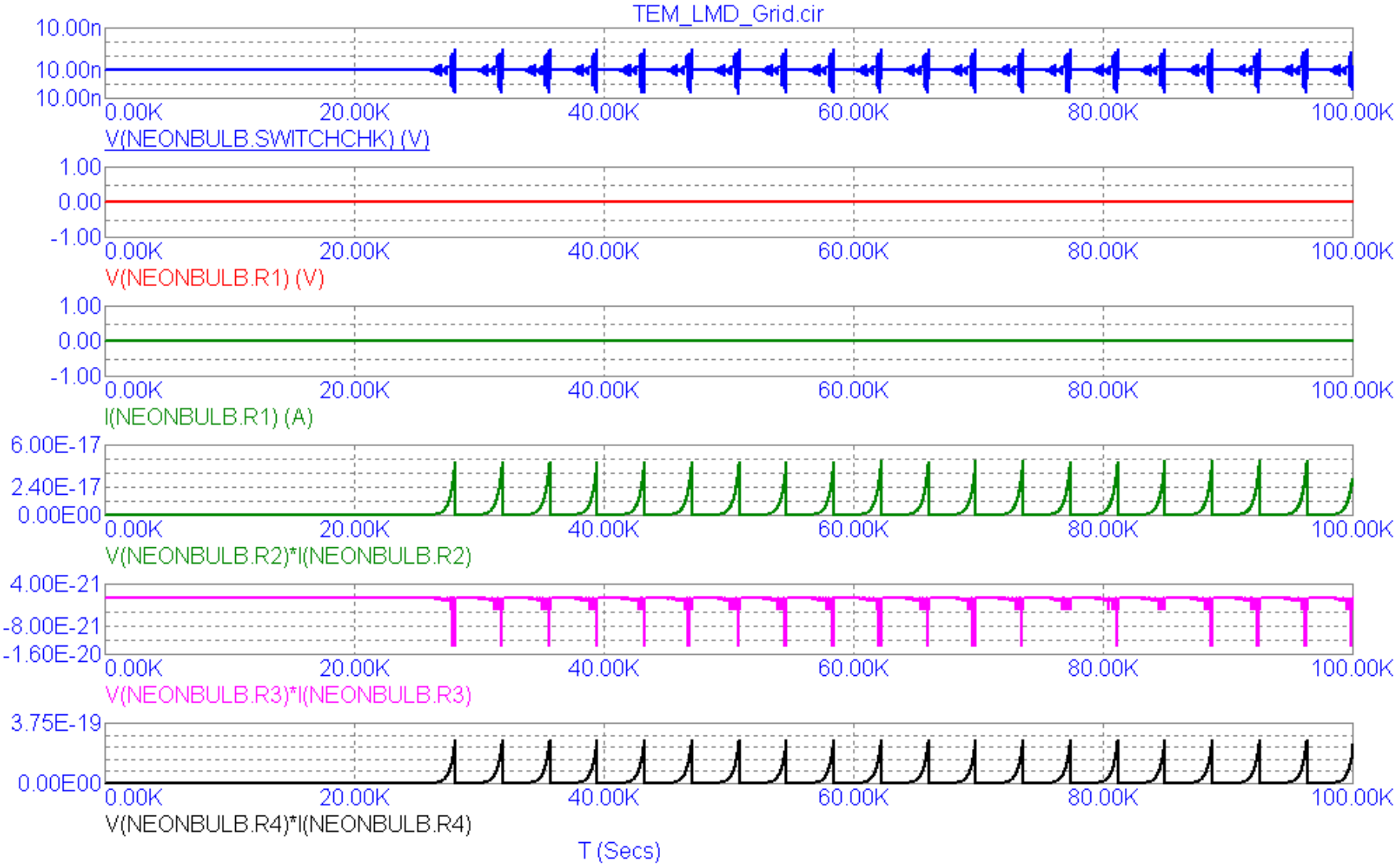
Instead, all four capacitors are diodic in character putting out a positively cresting waveform which suggests a dominant throughput...?



Peering into the macro, designed to emulate the behavior of a neon bulb spark gap...

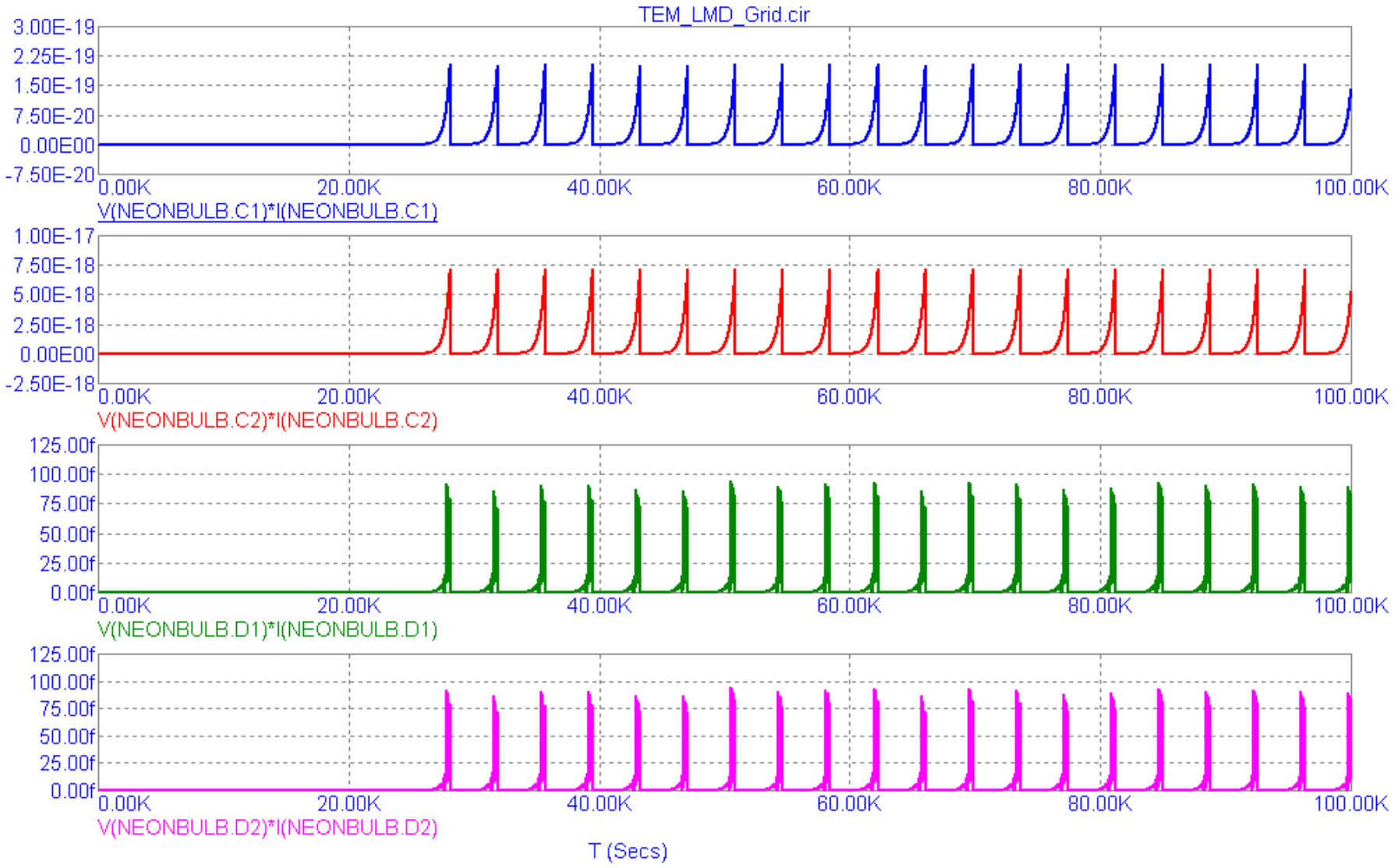


...I see no indication of any significant production of power (in the form of negative watts)...

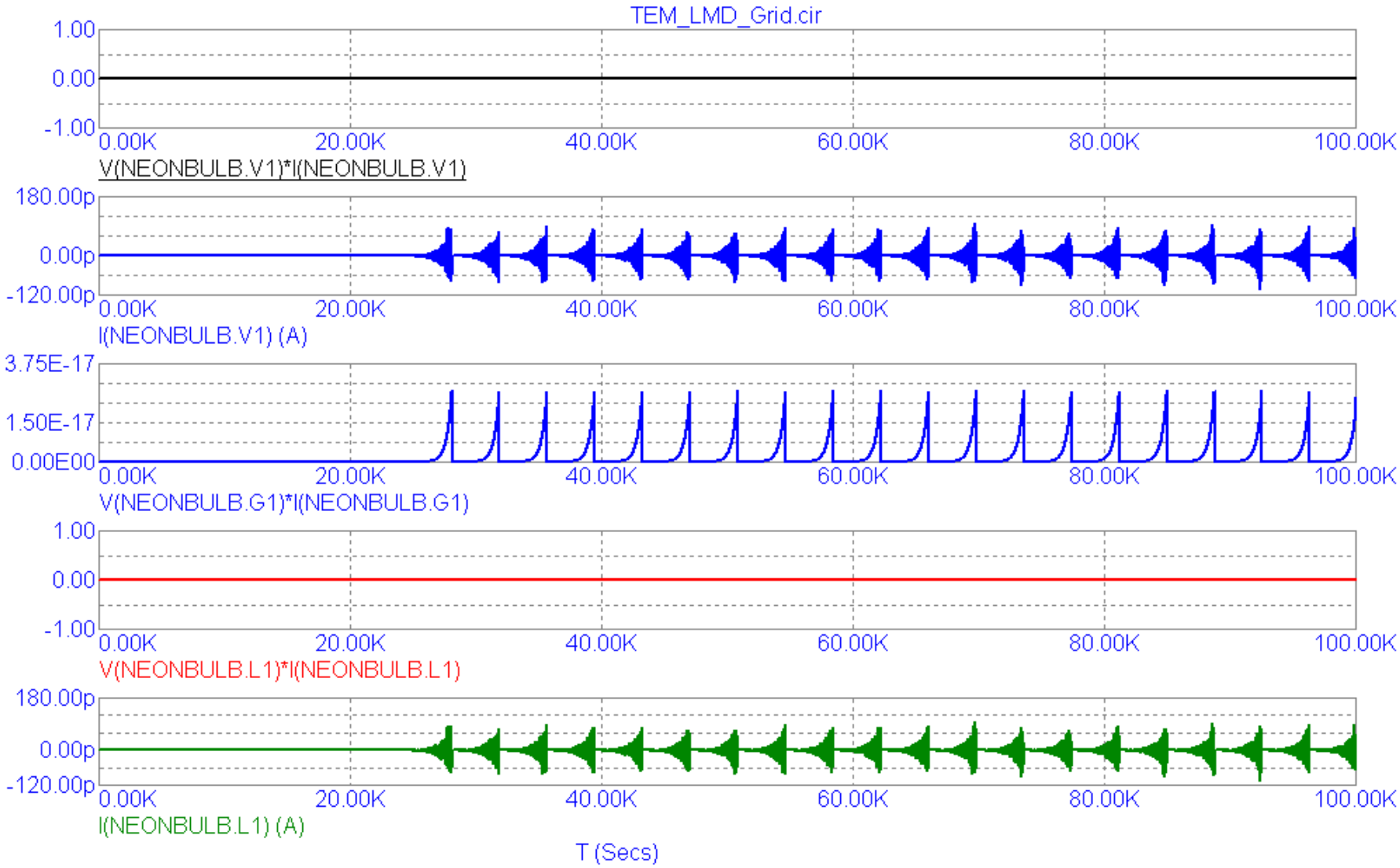


BTW, “NEONBULB.SWITCHCHK” would indicate that this spark gap is ON (arcing) if this node's voltage rises to 10V. In this case, this spark gap remains OFF all the time since this particular nodal voltage fails to rise that high. Instead, it remains at its OFF condition of hovering around 10nV.

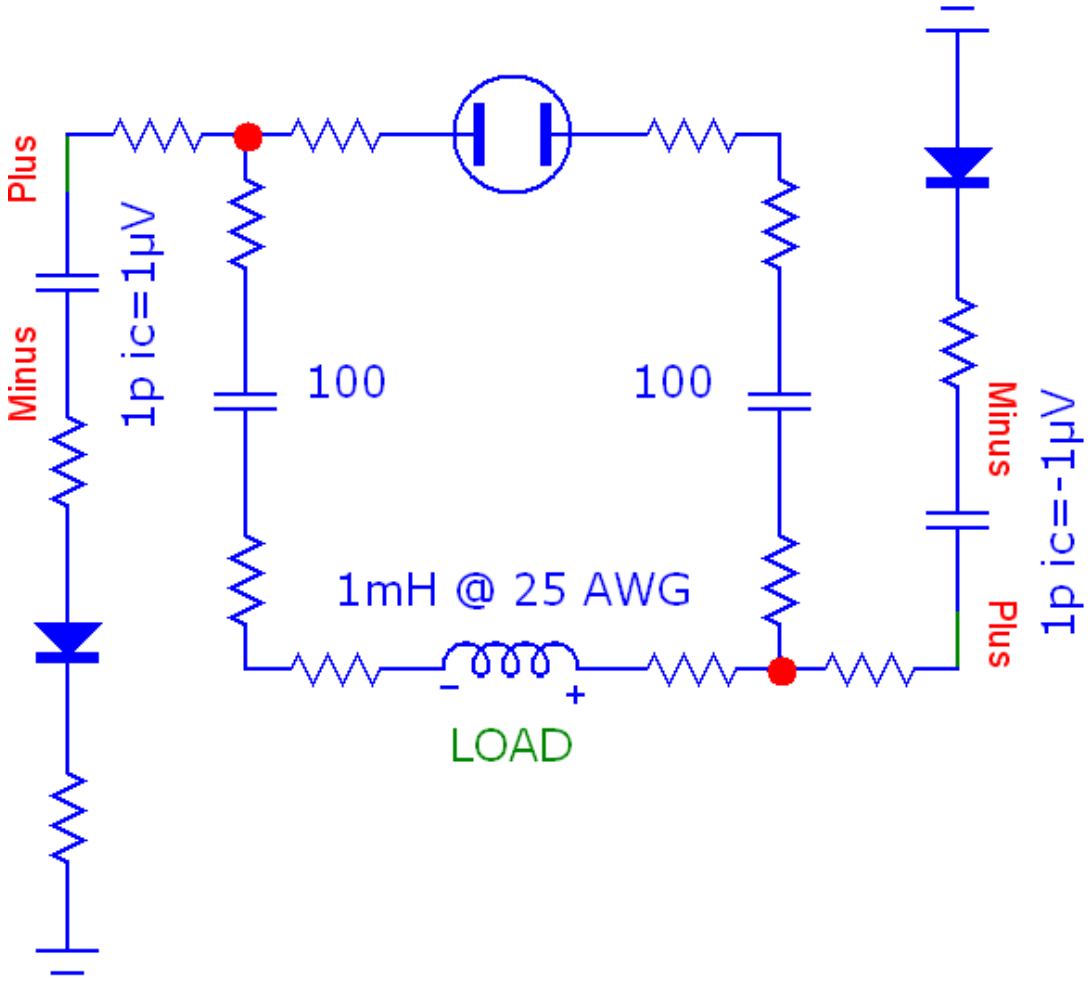
Checking this neon bulb's diodes and capacitors continues to fail to reveal any indication of where this overunity circuit's extra power source is coming from since the capacitors and the diodes of this spark gap are all exhibiting positive watts and the consumption of power...



This last chart of virtual oscilloscope tracings reveals no source of negative watts, yet indicates that the spark gap's electrodes (emulated by inductor, “NEONBULB.L1”) are failing to pass any current since they are not receiving any voltage despite the presence of a negative resistor, nearby, at “NEONBULB.R3”. I guess the overall power production, at resistor “NEONBULB.R3”, is insufficient to overwhelm the zero voltage of “NEONBULB.V1”...?



Another way to make the singular module explode is to add diodes...



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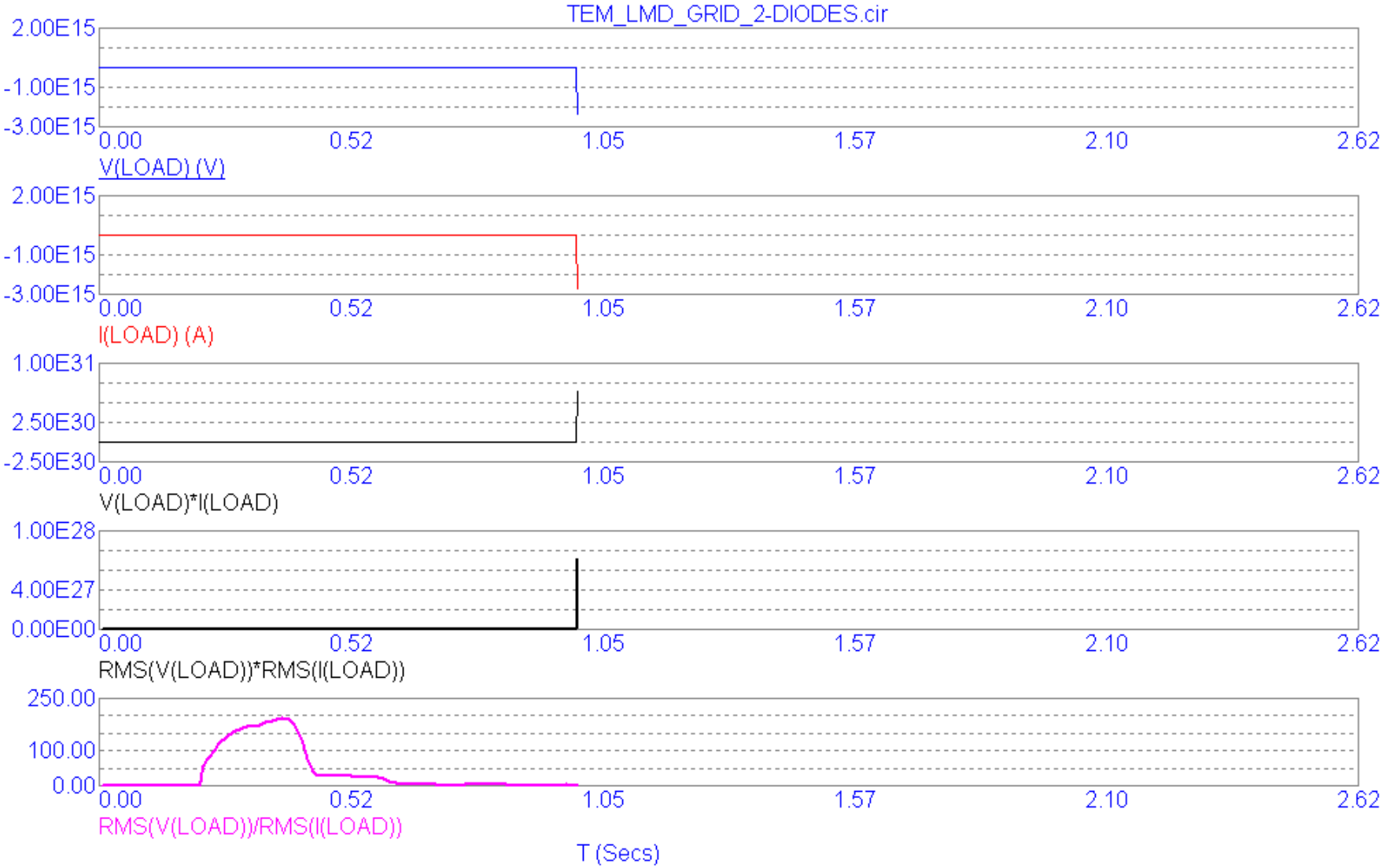
TEM_LMD_GRID_2-DIODES.cir
2.00E15
-1.00E15
-3.00E15
0.00
0.52
1.05
1.57
2.10
2.62
V(LOAD) (V)
2.00E15
-1.00E15
-3.00E15
0.00
0.52
1.05
1.57
2.10
2.62
I(LOAD) (A)
1.00E31
2.50E30
-2.50E30
0.00
0.52
1.05
1.57
2.10
2.62
V(LOAD)*I(LOAD)
1.00E28
4.00E27
0.00E00
0.00
0.52
1.05
1.57
2.10
2.62
RMS(V(LOAD))*RMS(I(LOAD))
250.00
100.00
0.00
0.00
0.52
1.05
1.57
2.10
2.62
RMS(V(LOAD))/RMS(I(LOAD))
T (Secs)