general schematic

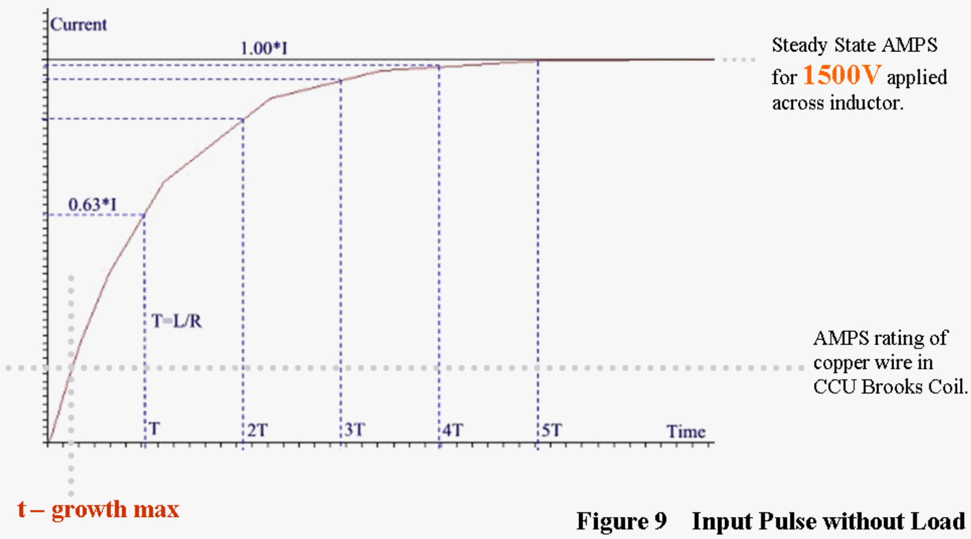
See attached diagrams all gifs so fix up the extension accordingly.

If you use a 1200V/1300V or 1400V cap there are a handful of mosfets that could do the switching rated at 1500V. The current max should be well below 50ma. Protection diodes should be used. The snubber is a must; check out the tech sheet pdf on snubber calcs sent previously.

http://www.st.com/stonline/products/families/transistors/power_mosfets/related_info/1500v_series_expansion.htm?wt.mc_id=expr_july_5_1500VMosfet%20

AAA

Figure 8 Inductor Current Growth



1. The larger the inductance, the larger the time constant L/R, and the *less steep* the current growth (di/dt) curve for the inductor. This means a longer time until **t-growth max** is met.

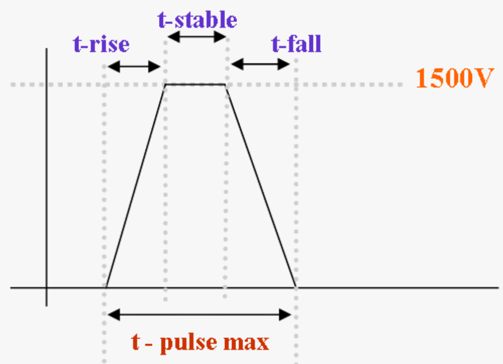
2. Assuming a perfect square wave then **t–pulse max** must be smaller than **t-growth max** or the wire will burn out. Ideally **t–pulse max** will be much, much smaller.

3. One of the conditions for an ether pulse/radiant energy to emanate from the copper wire is the induced EMF after time **t-rise** must be small enough that the voltage drop across the coil is at least 1000V. e.g. If a 1500V pulse is applied with a rise time fast enough that only 20V induced EMF occurs, after time **t-rise**, then the voltage drop is 1480V. This is a proxy method for determining if your pulse and coil will work together to create radiant energy. Adding iron even though it increase inductance does 'something' to prevent the ether pulse from happening.

4. Point 3 needs to occur repetitively where a SEP has been set up. The longer the wire, the more radiant energy is produced.

5. The period **t-stable** + **t-fall** represents wasted energy as the ether pulse has already occurred. **t-stable** can be zero.

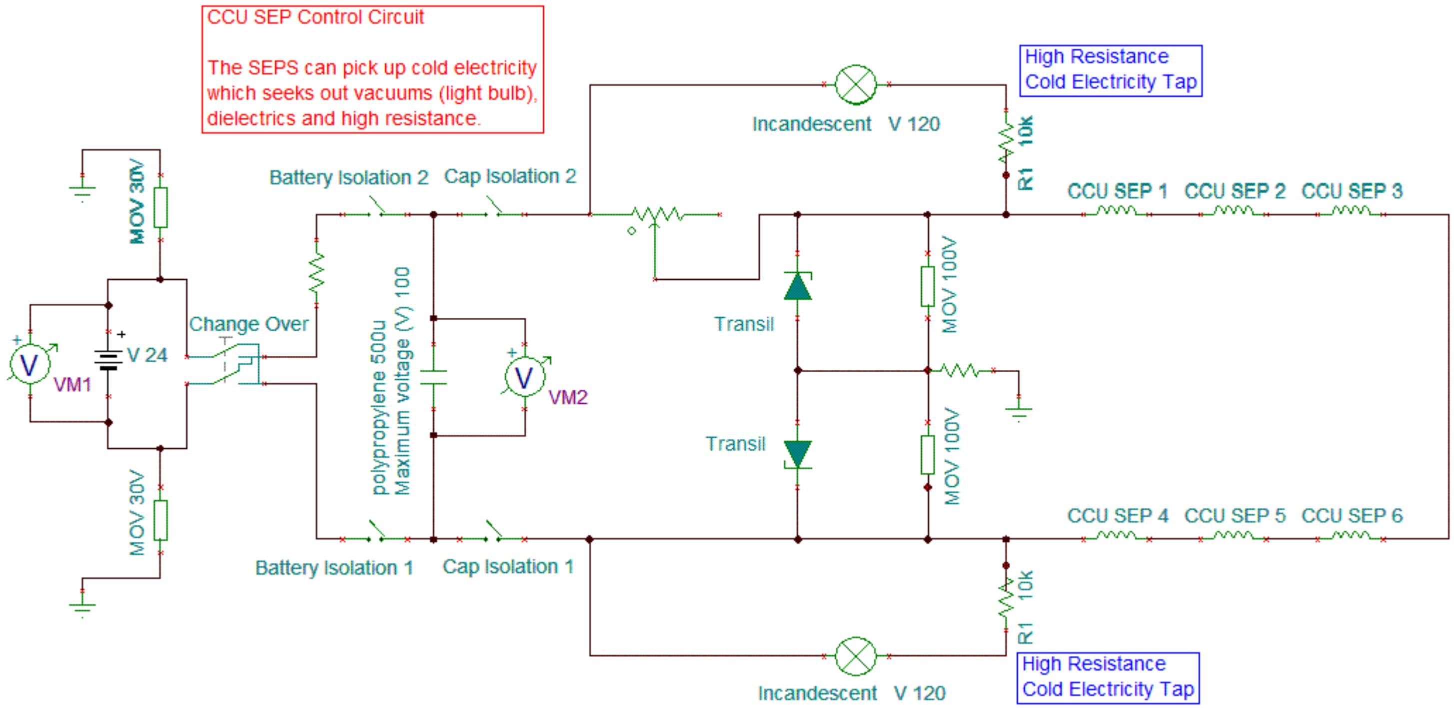
Figure 9 Input Pulse without Load



6. **But** if the input coils are not in the exact position required then delaying the start of **t-rise** and/or extending **t-stable** to generate more ordinary magnetic field can improve the level and stability of the output for some reason to do with coinciding interference patterns in the ether.

7. A straight up, straight down pulse with as fast a rise and fall time as possible will create plenty of output, even if coil placement is not perfect.

8. Dumping a capacitor until empty will work but at the expense of extending **t-stable** and **t-fall** considerably and stressing the current limits of the wire. Reducing capacitance considerably will have a large effect on final voltage achieved after **t-rise** making point 3 hard to achieve.



CCU SEPS in serial so cold current passes through all coils.
Only 1 CCU pulse coil - not shown in diagram (or two if pulsing in pairs) are pulsed.
The other coils pick up the ether pulses.

The transils are for grounding out very high voltage spikes which occur infrequently but would damage the capacitor. The MOVs are for higher energy bursts which sometime occurs.

The 'V' with circles are voltmeters. Although the light bulbs look like they are short circuited cold electricity will flow to them because of the vacuum of the bulb and the high resistance.
Cold Electricity will also flow to the capacitor where it converts back to a useful charge.

The light bulbs and capacitor are optional.

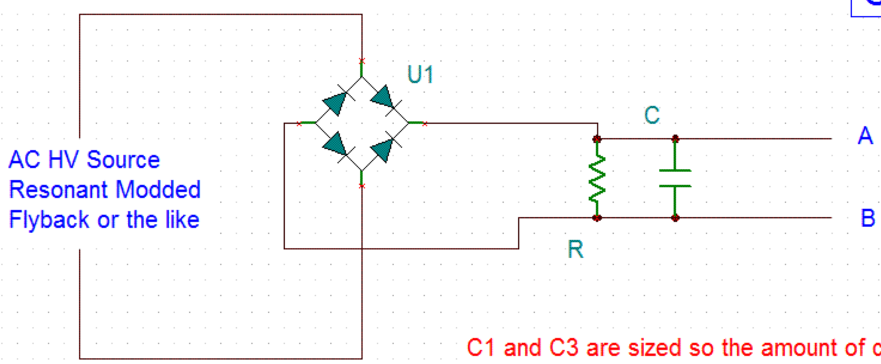
If cold electricity is happening it is possible to turn the current down and isolate the battery.
This kicks out the 30V MOVs and the whole circuit continue with voltage rising to 100V.
At this point there are two flow, cold current recharging and lighting bulbs and real current powering the CCU SEPS.

This is a form of feedback but limited by the size of capacitor so care is required if choosing to use the optional capacitor. There is no special volts or value for the capacitor. Polypropylene motor start caps that don't use oil work well but the volts are typically in the 400s. The reason not using oil is that exploding caps are nasty; exploding caps with oil are nastier.

The changeover manual switch is to swop over the North/South of the CCU SEPS.
DONT CHANGE WHILST DEVICE PULSES ARE SPINNING AND FIRST DISCHARGE CAPS.

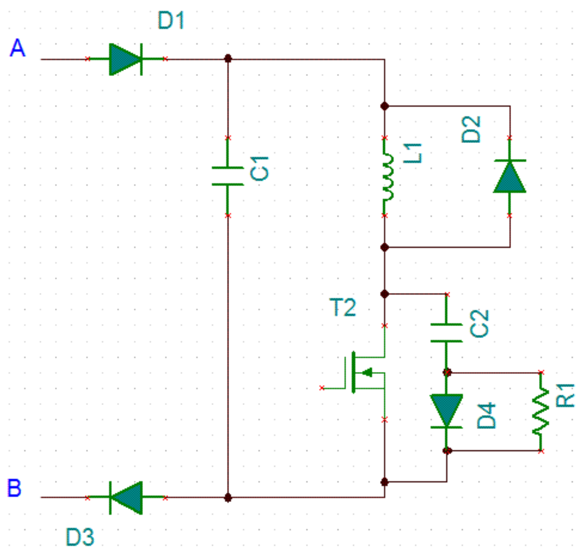
Replicate the setup for the MAIN and CB SEPs.

CCU Pulsing

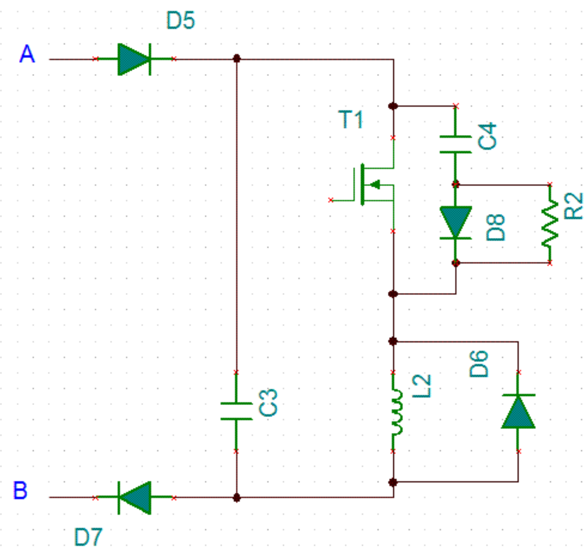


C1 and C3 are sized so the amount of charge depleted after each pulse is 1-2% of the capacitor size. This is so there is insignificant voltage decay during the pulse AND therefore maximum voltage until the end of the pulse.

The snubber circuit is important as the pulse is being turned off during the largest di/dt of the inductor current growth curve AND the capacitor is 99% fully charged.



Coil High
Driving Low Side



Coil Low
Driving High Side

Choose to drive all brooks coils either on the low or the hide side not a mixture of both.