

Re: Electrical Power Infrastructure

The 1910 Civic Improvement Plan for New Haven (Olmstead & Gilbert) recommended that the overhead power lines be undergrounded starting at the center of the city and then over time move outward. It is now 2020, and there is just a small part of the downtown free of overhead wires in New Haven, and not much better in other Connecticut towns, cities, and suburbs. Thomas Edison's early power networks in Manhattan were all underground in the 1890's. The tangle of wires that now obliterates the sky, makes firefighting and adjacent construction activity more difficult and hazardous, has also justified a never ending war on our trees. Due to weather events, crashes from vehicles, lightning strikes, normal weathering and aging, this system is intrinsically unreliable, expensive to maintain, **and well outside of any definition of resilience**. The utilities have a public relations firewall against undergrounding unless somebody else pays for it. We have allowed this degradation of our public space while these very utilities have made billions in profit in the preceding decades and pay their upper management millions. They spend hundreds of millions on tree trimming and removals, and also for the massive repairs required by extreme weather events such as we have just experienced (storm Isaias).

The tornados in 2018 broke over 2000 utility poles and had required the replacement of over 300 miles of wiring. Hundreds of thousands of households and businesses were dark, resulting in lost revenue, lost school days, spoiled food, health emergencies, and other related difficulties. The clean-up of public roads, which is essential for health and safety, is made exponentially more difficult because the downed trees are tangled up with power lines, which have to be removed first. We have just gone through the same ordeal from Isaias, with almost a million customers statewide losing power.

Although undergrounding is costly, over a long span of time it is more economical than constant replacement and repair of the overhead system. CT needs a state funding structure like California to enable undergrounding, because individual towns and cities would not be able to fund it. Let's move out of the primitive and inferior state of our electrical infrastructure, something that is absolutely essential in this era of extreme weather events. Compared to other developed countries around the world, CT and much of the US is backward on this issue.

The telephone, cable TV, and internet systems would also become less vulnerable to interrupted service outages if they were undergrounded also. No poles and wires means that the streets could be planted with the appropriate trees, and an engineered street lighting infrastructure would replace fixtures on brackets controlled by the pre-existing location of power poles. This would result in a much more beautiful and environmentally positive public space. Street trees are essential to make streets walkable for pedestrians, and to reduce cooling costs for adjacent buildings.

It is time to change this paradigm with new state regulatory legislation. Let's divert existing resources to a 100+ year plan to systematically replace our overhead wiring with a truly resilient underground system. Let Connecticut be a leader in resilience; rather than costing us, it will be more economical in the long run. Let's start planning for the long term, and not just keep fixing storm damage to put the lights back on for today.

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