

A Strong Electric Grid Requires Investments in Transmission

By Jim Cole

At UI, our first and fundamental obligation is to provide customers with safe, reliable electricity. As UI's Vice President of Projects and a 29-year veteran of the company, I'm proud our utility offers some of the strongest reliability in the nation.

That exceptional record is the direct result of the ongoing investments we've made in our distribution infrastructure: the poles, wires, and transformers our customers see on their town blocks and city streets. But the stakes are even higher when it comes to investing in the transmission system.

If distribution lines are the local roads of the electric grid, the transmission system is the interstate. The distribution network is hyper-local, serving individual UI customers and businesses, but transmission lines provide stable and reliable power from generating plants to the distribution system, interconnecting the electric grids throughout New England and the northeast.

UI oversees transmission infrastructure in partnership with the Federal Energy Regulatory Commission (FERC). While UI line workers can address several thousand of our customers' outages in a single evening, transmission outages occur on a much wider scale. We last saw that in 2003, when a few [overgrown trees](#) in Ohio brushed up against overhead transmission lines and knocked out power for approximately 50 million Americans across 7 states.

The last thing we want is to put the regional and local electric grid at risk by foregoing investment in the transmission infrastructure we manage. That's why, when UI performed a comprehensive asset condition assessment on one of our most important transmission networks, which follows the 25 miles from Fairfield to New Haven along the Metro North Railroad corridor, we identified the need for the infrastructure to be rebuilt and upgraded.

The Metro North transmission line equipment was installed in the 1940s and 1960s, long before the recent transition towards greater electrification. It sits on top of the railroad infrastructure, which itself isn't a preferred scenario since any issue with the railroad could entangle our critical infrastructure. To improve resiliency, our proposal before the Connecticut Siting Council is to build new monopoles that are close to, but separate from, the railroad, and remove the old support structures and wires. Some of these monopoles, especially in sensitive locations, would be higher than the current transmission infrastructure, which allows us to install fewer of them. That has three main benefits: it minimizes disruption to the community, protects the environment from unnecessary disruption, and conforms to current safety codes.

The comprehensive rebuild program, which began with evaluations in 2012, is divided into five phases, and each phase is essential to the ultimate success of the overall project. Four of the five phases have already been completed in New Haven, West Haven, Milford, Stratford and parts of Bridgeport, using the new monopole design. The fifth and final phase, from Fairfield to Congress Substation in Bridgeport, is projected to be in-service in 2028, pending the Siting Council's decision in our application, [Docket No. 516](#).

Lately, this fifth phase has generated considerable community interest, which we respect and appreciate. We are proud that our current proposal is the least environmentally disruptive, the most

fiscally sound, and the most compliant with the requirements of design criterion and the previous Siting Council decisions for the entire project.

Having analyzed several options for a construction plan, we are confident our plan minimizes impacts to wetlands, minimizes our construction footprint, limits the easements we would need to obtain, and is fiscally responsible for ratepayers. We look forward to continued dialogue with the Town of Fairfield, including First Selectwoman Kupchick and other stakeholders, throughout the remainder of the Siting Council process.

The benefits of this project extend from Fairfield through the entire state and across the region. First, rebuilding the lines significantly increases the reliability and resiliency of Fairfield's electric grid. The transmission lines feed into both Congress Street Substation and Ash Creek Substation, which together power the homes and businesses of nearly 16,000 Fairfield customers – nearly three-quarters of UI's customer base in the town. A catastrophic outage on these lines would put a large portion of the town in the dark, and likely impact the system's ability to support other customers in the region.

Beyond Fairfield, the whole region is relying on transmission upgrades like this one. The need for additional electric capacity is steadily increasing, as more homes and businesses convert to electricity for transportation, home heating, cooking, and more. As a result, the loads on our transmission system are only going up: the Independent System Operator of New England (ISO-NE) projects that by 2050, demand on the electric grid will [double](#). Meeting that demand is critical, with so many essential life-safety functions relying on electricity. That requires modern, resilient infrastructure.

UI's primary focus is to serve our local and regional customers with safe, reliable power. When we identify a need, we take prudent action that balances feasibility, community input, environmental impact, overall project benefits, and fiscal responsibility to arrive at the right solution for our customers.

The need for reliable, resilient power is essential today and will be even more so tomorrow. We all need, and will benefit from, this transmission rebuild, upgrade, and modernization project. Now it's up to us to deliver.

Jim Cole is the Vice President of Projects at United Illuminating. For more information on the transmission line rebuild, please visit <https://www.uirailroadtlineupgrades.com/>.