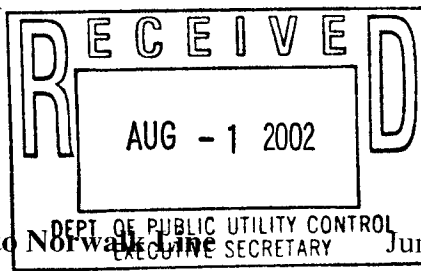


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Position Paper on Proposed 345kV Bethel to Norwalk Line June 25, 2002
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It was Upton Sinclair who said, "It is impossible to get a man to believe in something when his paycheck is dependent on his not believing." The issue of the proposed Bethel to Norwalk line is one where all sides will have important stakes in the eventual outcome. We cannot ignore that every participant in this process will bring both the baggage and the advantage of their experience and render an opinion within the context of their interests. This cannot be avoided. No one is unbiased. In my own case I am a former energy executive who was involved in the early stages of deregulation and the first merchant electricity trades. Yet I am a Wilton resident who also owns several acres that are part of the National Seashore Conservation Reserve. The five towns have a need for reliable and reasonably priced power but not at the cost of degrading the quality of life especially disproportionately to those who live along the proposed route.

It is both the nature of markets and the nature of politics that these competing desires and issues will need to be discussed and balanced in the course of decision-making. There are no single bullet solutions or a specific formula that will generate a "scientific" resolution of the proposed project. Even when the facts are established and the specific desires are categorized in our initial phase of this assignment, there still will remain much work to be done in crafting compromises that satisfy as many constituents as possible in a fair and hopefully precedent shaping fashion.

I believe that there will be ten areas that will need to be examined thoroughly before the working group can render an opinion or recommendations that fulfill the requirements of Executive Order 26. These are:

Demand Forecasts

Much of the rationale for this and many large capital energy expenditures are heavily reliant on forecasts for usage. History has shown that these forecasts and others like them have often been wildly inaccurate. Within the energy industry alone we have seen the predictions of \$100/barrel oil, zero variable cost nuclear energy, and lower power prices post deregulation fall grossly outside expectations. Even something as seemingly simple as power demand forecasts upon which this project rests are not certain with a high degree of probability. While forecasts for total power usage in lower Fairfield County are projected to grow along with the peak hourly load, we have seen total demand and peak usage shrink in many areas of the country and even in Connecticut in the 90's overall usage declined. Tellingly the New England ISO's *next day* usage forecast is on average more than 2 ½ percent in variance to actual usage on a consistent basis. One standard deviation on daily power usage for Connecticut is 745 megawatts, which means a third of the time daily usage is outside the equivalent of all the generation capacity of lower Fairfield County. Any project that will involve substantial investment and social costs dependent on long range usage of a commodity that is inelastic in its demand and subject to quantum technological changes must have the underlying usage assumptions

rigorously tested and understood. Too many decisions that in retrospect were an exercise in folly began with the phrase, “Assume...”

Load Mitigation and Management

The truly awful developments in California that have caused at least \$150 billion dollars in what might be criminal expropriation with not even one benefit (power prices in California are 2 and ½ times what we pay in Connecticut with currently no choice available) had many reasons. To many it is an example of going too far in the worship of an unfettered market; to others it is an example of what can go wrong when we did not go far enough. Putting aside this debate for the moment what is crystal clear about the California experience and is reinforced by experience in other markets, is that a market cannot work when the design of that market does not allow both buyers and sellers to have access to the same information, especially price. Especially in electricity where the short-term supply of power cannot be increased beyond a certain point, it is critical that consumers have the ability to see and react to changes in prices *prior to incurring the costs*. Otherwise there is no way for price to calibrate the market. These load mitigation, shifting, and shaping programs are at the heart of an efficient market design. The foundation of the argument for energy deregulation rested on the belief in the improvement in resource allocation that free choice would provide. How can this be achieved when consumers cannot respond to price signals? If someone is using 12-cent/kWh power when the value they would freely place on it is less, is this advancing the cause of market efficiency? Over the last ten years in, when incentives were not as strong as they are today, on a national basis we saw the tripling of megawatt hours saved and doubling of peak load reduction through the implementation of load management and energy efficiency programs. This has resulted in a peak 7% lower than it would have been otherwise and a decline of usage equivalent to 8,000 megawatts. This is more than twice total current Connecticut usage. We are just beginning to bolster and expand these incentives in New England and the importance and potential impact of these of these programs cannot be overstated. Properly administered I can think of no program that combines free choice, conservation, respect for the environment, and essential market balance better than load management.

Vertical Integration

It is often amazing how much we miss something when it is gone. One of the cornerstones of the regulated utility structure was the belief that the production, transmission, and delivery distribution of power was best done by a vertically integrated organization. Perhaps in error, we forced disintegration of the utility through the mandated selling of generation. While this may or may not have helped the development of a competitive market (its intent), it did over the short term make the planning and coordination of complimentary investments (generation and transmission) more difficult. In fact it has created an unintended incentive. Because some investments are complimentary and some are substitutes often sound investments are “chilled” (many distributive generation providers have said that *proposed* generation or transmission projects are the single biggest threat to an incremental investment). Generators or

transmission companies will often announce a project with the intent to discourage competing proposals. In other cases quality projects are shelved because of the inability to coordinate dependent investments. While some may argue that these characteristics are routine in all markets very few markets reward a first mover regardless of the desirability or efficiency of the process to the virtual elimination of competition. The unshaken belief in this “game” theory as a way to organize a market best is equivalent to ignoring a forest fire because over the long term it encourages better forest growth. This disappearance of the formally organized vertical utility as the predominant market structure makes the oversight by public organizations more important than it was prior to deregulation not less.

Cumulative Impact

Similar but separate from the need for vertical integration is the management of cumulative impacts. Just as projects across the supply chain influence each other so do projects over time. This temporal impact is not only economic (where a road is built will determine where housing is located greater than any other single variable) but also environmental. Any single project may comply within particular guidelines while cumulatively the projects produce the outcome that is specifically not desired. It is up to our working group with others to envision any project over time and in concert with other related proposals.

The Law of Commons or Capturing Externalities

Cost base rate making was another cornerstone of the regulated utility structure. Capitalism relies on price signals to achieve the greatest and fairest allocation of resources. Both systems breakdown when true costs are not captured. While it is difficult to put a price on aesthetics, environmental devaluation, and peace of mind it is critical that we attempt to do so and to allocate those costs where they legitimately reside. When these externalities or common costs involve potential value transfers between public and private interests, between regions or states then a public review that is even more thorough is required.

Distributive Generation

No single development holds out as much hope to alleviate many of the difficulties of electricity deregulation than distributive generation. Unfortunately, as in many things, there are trade-offs and existing imperfections in realizing the potential of this technology. Distributive generation would lessen the demand for transmission assets. Distributive generation would foster quicker and more targeted investment decisions. Distributive generation would lessen the problem of load pocket congestion. The lessening of reliance on central power plants would greatly increase our national security. Unfortunately the efficiency of these units while improving in relation to central power plants is still inferior. In addition both pollution amounts and capital costs are less favorable to distributive generation in relation to central power plants. While time and technology might overcome these impediments, this progress cannot be expected if

public entities do not ensure that non-economic barriers to the use of distributive generation are eliminated. We cannot realistically expect investor owned utilities to husband the development and introduction of a technology that would threaten their franchise and so we must ensure that the playing field is level enough that value created is the determinant to which model is superior and not capital strength or artificial market barriers. We should remember that many utilities would not have grown and prospered without the concessions granted to them by public entities.

Technology

While we should not choose or endorse a particular technology we should recognize that in many cases the “answer” to a question presupposes a technological choice. For example how much power can be transmitted on a given line or how much heat or how large an electromagnetic field is generated by this transmission is a function of the availability and cost of different material inputs and prevailing technology. Under the banner of free markets or engineering science we cannot abrogate the responsibility for exploring and encouraging certain technological choice. For example, while today almost no consumer would choose a metal dashboard for their automobile 40 years ago it was public authority that encouraged the development and use of lighter materials (originally for safety and not fuel economy or aesthetics). We must have an open discussion about available and prospective technologies and not feel inhibited toward favoring certain paths of development. Public entities have never remained neutral in technological preference nor should they.

Interstate Commerce

CL&P has indicated that this proposed Bethel to Norwalk line is not part of a New York-Connecticut power exchange. With power prices greater in Long Island, an admitted crisis in Long Island supply, the recent agreement on a Regional Transmission authority between New York and New England, and the rated capacity for the line in significant excess of the anticipated Connecticut usage it would appear that at some point the interstate transmission of power will be a significant factor in the operation of this line. We must recognize that this exchange between states can be useful in either a regulated environment (for stability and reliability) or is protected under normal commerce that is conducted between states in many goods. What we must however insist upon is an honest assessment of the issues that affect each of the states and ensure that costs and responsibilities are apportioned fairly. While we cannot nor should not inhibit interstate commerce it is essential that there is sufficient and appropriate oversight on this activity and that we adequately represent the interests of Connecticut.

Public-Private Tradeoff

Probably the greatest lesson from the California experience that unfortunately has been repeated in many other markets throughout history is that when private and public interests intersect or become blurred in a transition from a regulated to a non-regulated market great danger exists for abuse. This happened with oil price controls in the 70's as

well as in the Savings and Loan experience in the 80's. Private firms owe an obligation to their shareholders and are focused therefore on maximizing income within legal constraints. Procedures, protocols, and oversight differs greatly when transmission costs are the responsibility of consumers and socialized across jurisdictions than when transmission becomes a "for profit" endeavor. There is nothing wrong with profit maximization as long as public authorities do not allow investor owned firms to switch between the two arrangements or straddle the jurisdictions simultaneously. It is at this time where the probability of abuse and performance breakdown is almost inevitable.

Unintended Consequences

All most all interested parties will possess a high level of expertise and a passion of conviction in this analysis. What everyone must remember that even with the best of intentions we must be aware that any decision we make will eventually have consequences that were never anticipated. While a thoughtful and deliberate approach to this issue will minimize and lessen the severity of these consequences, they can never be eliminated. It is therefore important that every participant keeps an open mind and alters his or her position when the facts warrant it. We must stay focused on the end goal of seeing that Connecticut and lower Fairfield County has reliable, and affordable energy while maintaining community and environmental standards. The key to achieving this end is to combine diligence with truth in an open and non-confrontational setting at every step along the way.