STATE OF CONNECTICUT CONNECTICUT SITING COUNCIL

The Connecticut Light and Power

DOCKET NO. 272

Company and the United Illuminating

Company Application for a Certificate

of Environmental Compatibility and :

Public Need for the Construction of a

New 345-kV Electric Transmission Line :

and Associated Facilities between the

Scovill Rock Switching Station in

Middletown and the Negroulle Cylestetics

Middletown and the Norwalk Substation in Norwalk, Connecticut

MARCH 16, 2005

BRIEF OF THE WILSONS IN RESPONSE TO THE APPLICANT'S PROPOSED 345 kV TRANSMISSION LINE

EXECUTIVE SUMMARY

The following is the brief Linda Wilson and the South Main Street Irrevocable Trust ("Wilsons") in response to the Applicant's Proposed Aboveground Transmission Line to be located along the existing easement in the so-called Royal Oak Subdivision, which transmission line is partly located in the Towns of Middlefield, Middletown and Durham. This brief is divided into five sections, (1) Wilsons' Preferred Alternatives; (2) Comparison of the Environmental Impact of Transmission Lines and Cables in the Existing Royal Oak Easement and Proposed Royal Oak Bypass through the Wilson's Middletown Parcel; (3) Statutory Construction of the Term "Residential Area" as Used in Section 16-50p(c)(3) and 16-50p(h) of the Connecticut General Statutes; (4) Statutory Construction of the Term "Technologically Feasible" as Used in Section 16-50p(h) of the Connecticut General Statutes; and (5) Discussion of Transmission Line/Cable Costs in Evaluating Alternative Proposals. This brief leaves to

others to discuss the extent to which KEMA's recommendation that capacitance of the system will not support any additional underground cable beyond the 24 miles of XLPE cable already approved for down state obligates the Siting Council to reexamine and reallocate the areas of underground cable between the northern and southern segments of the system. However, for purposes of this brief, it is sufficient to call the Siting Council's attention to the obvious juxtaposition of the outcome, namely, that the area receiving the sole benefit of additional electrical supply is also the sole beneficiary of the legislative preference for underground cable and that the area deriving no benefit from the additional electrically supply also receives the burden of aboveground transmission lines.

It is necessary to define several terms before summarizing the Wilsons' position on the five areas referenced above. For purposes of this brief and the findings of fact, the use of the term "Existing Royal Oak Easement" means: the current easement through the Royal Oak Subdivision and a portion of the Wilsons' property lying mostly in Durham; and the term "Proposed Royal Oak Bypass" means: the bypass proposed by the Town of Durham commencing on the westerly side of Route 17 through the Towns of Middlefield and Middletown and then crossing Route 17 and bisecting the Wilsons 80 acres residential subdivision to a point where it joins the Existing Royal Oak Easement. The term "Existing Wilson Easement" refers to that portion of the Existing Royal Oak Easement which is owned by the Wilsons.

(1) Wilsons' Preferred Alternatives. The Wilsons are vehemently opposed to the utilization of the Proposed Royal Oak Bypass for either aboveground transmission lines or

underground cable and have set forth arguments under the comparison of the Existing Royal Oak Easement and the Proposed Royal Oak Bypass to support its position. Since the Wilsons also own land in the Town of Durham subject to the Existing Wilson Easement of the Applicant, they have a preference for undergrounding the 345 kV cable either in the Existing Royal Oak Easement or the Town of Durham roadways as proposed by that Town. Further, if the Council approves aboveground transmission lines, the Wilsons strongly favor the Applicant's proposed monopole configuration which eliminates the two existing "H" pole constructions for the two 115 kV aboveground transmission lines. These preferences are further discussed below.

(2) Comparison of the Environmental Impact of Transmission Lines and Cables in the Existing Royal Oak Easement and Proposed Royal Oak Bypass through the Wilson Parcel. The Siting Council is required to compare the environmental compatibility of the proposed 345 kV transmission line/cable in the Existing Royal Oak Easement to proposed Royal Oak Bypass. This section compares the environmental and economic impact of the two routes and concludes that placing the 345 kV transmission lines/cable in the Existing Royal Oak Easement presents the lowest environmental and economic impact of the two alternatives. The environmental impact is compared for both above and below ground installations and in each instance the impact to wetlands, natural resources and visual impact is significantly lower when the Existing Royal Oak Easement is utilized. Additionally, the economic impact to the property owners and the municipalities tax base has less impact when the 345 kV cable is placed in the Existing Royal Oak Easement.

- (3) Statutory Construction of the Term Residential Area as Used in Section 16-50p(c)(3) of the Connecticut General Statutes. This section discusses the Wilsons' argument that the term "Residential Area" should be given its ordinary meaning, namely, an area suitable for residential purposes as distinguished from commercial, industrial, open space and other purposes. Municipal planning and zoning ordinances define residential areas and such definition should be used by the Siting Council for purposes of Section 16-50p(c)(3). This interpretation is consistent with legislative history. Furthermore, to do otherwise would create a potential morass of exceptions. As we state in our brief, "the statute does not distinguish between the last vacant lot in a subdivision and the first lot to be developed".
- (4) Statutory Construction of the Term "Technology Feasible" as Used in Section 16-50p of the Connecticut General Statutes. It is the Wilsons' position that the phrase "technologically feasible" as used in Section 16-50p(h) means capable of being accomplished. This term does not distinguish between competing feasible alternatives or the better or best feasible alternative. We conclude that both XLPE cable and GITL are feasible technologies which can be employed in the Existing Royal Oak Easement. Furthermore, we believe that reconsideration of the 24 miles of XLPE cable proposed for the down state segment should evaluate whether GITL cable can replace segments of the XLPE cable, thereby, allowing either XLPE or GITL cable to be used in the Existing Royal Oak Easement.
- (5) Discussion of Transmission Line/Cable Costs in Evaluating Alternative Proposals. The Siting Council asked that the parties consider whether costs should be assessed in considering the alternative transmission line proposals. While it is clear that the legislature

was cognizant that enacting Section 16-50p(c)(3) would result in increased costs due to its underground preference for high voltage cable, it is the Wilson's position that the costs of underground cable in the Existing Royal Oak Easement is insignificant when compared to the overall costs of the transmission line system and, therefore, should not be considered for this segment of undergrounding. The Wilsons do not take a position on the overall undergrounding costs for the entire system as that is not an issue of concern for them.

ARGUMENT

I. Wilsons' Preferred Alternatives.

The Wilsons are vehemently opposed to the installation of transmission lines/cables along the Proposed Royal Oak Bypass and favor use of the Existing Royal Oak Easement for transmission lines/cables. The Proposed Royal Oak Bypass would bisect the Wilsons 25 lot subdivision and cross over 14 residential lots. Use of the Proposed Royal Oak Subdivision would require the Applicants to condemn the Wilsons' property for purposes of obtaining an easement. This action would not be required if the new transmission lines/cables were placed in the Existing Royal Oak Easement.

The Wilsons support the use of XLPE cable in the Existing Royal Oak Easement and, if the residents of the Royal Oak Subdivision concur, would also support the use of GITL cable.

The advantage of XPLE cable in the Existing Royal Oak Easement (or along the roadways in

¹ The Applicant currently holds an aboveground easement in the Existing Royal Oak Easement. The construction of XLPE or GITL along the Existing Royal Oak Easement would likely require an underground easement, which the Wilsons are prepared to grant.

the Town of Durham) is that there would be no increase the long term aesthetic impact from the present transmission line configuration except in the area where the line converts from above ground to below ground transmission. While it is recognized that capacitance is an issue with XLPE cable, the Wilsons believe that for aesthetic reasons they and the Royal Oak residents would prefer XLPE cable over GITL cable. The Wilsons continue to support GITL cable if capacitance is an issue for the Council and if the Royal Oak residents are willing to accept such construction. It is noted that such construction would be more palatable to the residents if GITL installation resulted in elimination of one of the two "H" poles presently carrying 115 kV cable in the Existing Royal Oak Easement.² Moreover, the residents may also prefer the conversion of the remaining above ground 115 transmission line into GITL cable so as to eliminate all of above ground transmission lines in the Existing Royal Oak Easement.

If the Council determines that an above ground transmission line is appropriate in the Existing Royal Oak Easement, the Wilsons prefer the Applicant's proposal which consists of a 105 foot (typical height) monopole used to carry the 345 kV and two existing 115 kV conductors. This would result in elimination of the two existing "H" pole structures presently in the Existing Royal Oak Easement. If the Royal Oak residents prefer a higher monopole structure, the Wilsons continue to prefer the 105 foot structure along the Existing Wilson Easement through their property located mostly in Durham. The Wilsons believe that the 135 foot and 150 foot structures pose an adverse aesthetic impact on their property and the surrounding community. Furthermore, the Wilsons oppose Alternative 6 which is identified as

² See Wilsons' Proposed Findings of Fact 42 and 43 wherein Dr. Boggs testifies that one of the two 115 kV cables

"structure type C" on the list of alternatives for aesthetic and other reasons (See Wilsons' Proposed Findings of Fact 29).

II. Comparison of the Environmental Impact of Transmission Lines and Cables in the Existing Easement and Proposed Bypass through the Wilson Property.

The Council should oppose the use of the Proposed Royal Oak Bypass for either aboveground transmission lines or belowground cable for environmental reasons. The record contains ample information demonstrating that the environmental impact to wetlands and natural resources would be significantly greater if the Proposed Royal Oak Bypass is utilized instead of the Existing Royal Oak Easement for transmission lines/cables. Furthermore, there would be far greater visual aesthetic impact to the community due to the higher elevation of the Wilson property.

In evaluating the various alternatives and the proposed placement of transmission lines/cables, the Council is required to consider not only the requirements related to high voltage electric lines but also its general requirements pertaining to environmental compatibility and public need, Section 16-50k. This section, in part, provides:

... no person shall exercise any right of eminent domain in contemplation of, commence the preparation of this site for, or commence the construction or supplying of a facility, or commence any modification of a facility, that may, as determined by the council, have a substantial adverse environmental effect in this state without having first obtained a certificate of environmental compatibility and public need, . . .

(See also environmental provisions of Section 16-50p).

A copy of Wilsons Exhibit 5 (overlay of the Existing Royal Oak Easement and Proposed Royal Oak Bypass) is attached for clarification.

The running of transmission lines/cables through the Proposed Royal Oak Bypass would have a significantly greater wetlands impact than on the Existing Royal Oak Easement (See Wilson Exhibit 5 Admitted on January 19, 2005) (Note the Proposed Royal Oak Bypass is referred to as the "Alternative Route" on Exhibit 5). The Bypass commences on lands of John T. Moss through areas denoted on the Exhibit as "large wooded wetland" and continues through significant wetland property on land of the Middletown Water Company. Upon entering the Wilson property, the Proposed Royal Oak Bypass encounters several areas of wetlands before it reconnects the Existing Royal Oak Easement. By comparison, the Existing Royal Oak Easement has significantly far less wetlands (See Wilson Proposed Findings of Fact, 15, 16 and 17). Construction of overhead transmission lines or underground cable would have a significantly greater impact on these wetlands if the Proposed Royal Oak Bypass is utilized. These impacts would include, but are not limited to, destruction of wetlands habitat to clear cut a path presumed to be a 125 foot easement and the resulting impact on wetlands vegetation and wetlands wildlife.

The constructions of transmission lines or underground cable in the Proposed Royal Oak Bypass would result in significant deforestation for construction of the easement. Wilson Exhibit 5 depicts significant areas of forested land including "large wooded" areas on properties of John T. Moss and Middletown Water Company and "mature mixed hardwood".

forest" on lands of the Wilsons. By contract, construction of the transmission lines or underground cable results in no deforestation and little or no vegetation impact because the Applicant has maintained the easement in a manner that would prevent vegetation from impacting the transmission lines (See Wilson Proposed Findings of Fact 23, 24 and 25).

Construction of the transmission lines/cable along the Proposed Royal Oak Bypass present a significantly greater adverse aesthetic impact due to line of sight considerations than would be present in the Existing Royal Oak Easement and, thereby, have a greater impact on the community. The Proposed Royal Oak Bypass through the Wilsons property traverses along a ridge line having a height of approximately 492 feet above sea level. (See Wilsons topographical Exhibits admitted on January 19, 2005). By comparison, the Existing Royal Oak Easement is between approximately 50 to 150 feet below this ridge line (See Wilson topographical Exhibits admitted on January 19, 2005). Any transmissions lines or poles placed on the Proposed Royal Oak Bypass along the Wilson Parcel would have a significantly greater impact from an aesthetic line of sight prospective. (See Wilson Proposed Findings of Fact 18, 19, 20, 21).

Finally, the length of the Proposed Royal Oak Bypass in comparison to the Existing Royal Oak Easement would have a significantly greater impact on the wetlands, natural resources and aesthetic considerations for the reasons cited above. (See Wilson Proposed Findings of Fact 22).

³ The Wilsons incorporate by reference any concerns posed by this or other water companies.

The Council should not approve the construction of transmission lines/cable over the Proposed Royal Oak Bypass because it would have a significant economic impact on the Wilsons and the Town of Middletown. In addition to the foregoing, the concept of shifting the burden of transmission lines from an area with an existing utility easement to an area without such burden should not be considered by the Council.

The Proposed Royal Oak Bypass would intersect 14 lots on the 25 lot luxury home subdivision and, thereby, eliminate the market for luxury homes in the entire subdivision according to the Wilsons. The Wilsons also intended to occupy two of the lots as their principal family residence. The introduction of transmission lines/cables into the subdivision would destroy the subdivisions economic value. This would also have an adverse impact on the tax base for the Town of Middletown. In addition to the Wilson properties, homeowners at the end of Alcorn Drive in Middletown would also be economically impacted by such transmission line as the transmission line would pass in closer proximity (and higher elevation) than if the 345 kV transmission line was placed in the Existing Royal Oak Easement. This could also adversely affect the Town of Middletown tax base.

In sum, the record does not support the relocation of the 345 kV transmission line outside the Existing Royal Oak Easement.⁴

⁴ It is the Wilsons' position that the Council does not have authority to relocate the 345 and two 115 kV conductors to the Proposed Royal Oak Bypass as was suggested by the Town of Durham. However, it would be in appropriate for the Council in this instance to shift the burden of transmission lines from a group of property owners who acquired property with knowledge of the easement to property owners who had no knowledge of the

III. Statutory Construction of the Term Residential Area.

Conn. Gen. Stat. § 16-50p(c)(3) (and § 16-50p (h)) mandates that the Siting Council not approve the placement of any 345-kV transmission lines overhead adjacent to any "residential area" unless the Applicants have met the burden of establishing that alternatives are not technologically feasible. The Attorney General in his Proposed Findings of Fact submitted in this matter, argues that the phrase "residential area," as employed in Conn. Gen. Stat. § 16-50p(a)(3)(D) (query § 16-50p(h)?), means "existing residences (houses, apartments, etc.) in areas that are zoned residential." Attorney General's Proposed Findings, ¶ 52. The Attorney General is wrong in two respects. First, this issue of statutory construction is not a question of fact, but one of law granting the courts plenary review of such an interpretation, *see City of New Haven v. Bonner*, 272 Conn. 489, 493 (2005); therefore, its inclusion as an uncited fact in the Attorney General's Proposed Findings of fact is both erroneous and potentially misleading. The Siting Council should not consider the Attorney General's improperly raised and unsupported argument as to the definition of "residential area."

Moreover, the definition proposed by the Attorney General does not stem from the statutory language, and is contrary to the purpose of the regulatory scheme that Public Act 04-246 was intended to implement. Statutory interpretation is governed by the terms of Public Act 03-154, which overruled the portion of our Supreme Court's decision in *State v. Courchesne*, 262 Conn. 537, 816 A.2d 562 (2003), in which the Court held that it would not require a linguistic ambiguity in order to consider extra-textual evidence of a statute's meaning

easement. Also, it should be remembered that the Wilsons also own property in Durham subject to the Existing

(legislative history/intent, overall regulatory scheme, etc.). *Paul Dinto Electrical Contractors, Inc. v. Waterbury*, 266 Conn. 706, 716 n. 10 (2003). Accordingly, to properly interpret the statutory language of Conn. Gen. Stat. § 16-50p(h), this Council must first look exclusively to the language itself. If the language still provides ambiguity, then the Council is permitted to consider the legislative intent and the placement of the language in light of the overall statutory scheme. *See Bonner, supra*, at 495; *Paul Dinto Electrical Contractors, Inc., supra*, at 716.

The term "residential area" as employed in Conn. Gen. Stat. § 16-50p(c)(3) and §16-50p(h) plainly includes all real property that is zoned residential, whether developed or not. As described above, the Council must first determine whether the statutory language is ambiguous. In this case there is no ambiguity. The word "residential" is not defined in the statute, but its dictionary definition is, "Pertaining to or suitable for residences (residential district)." West's Legal Thesaurus/Dictionary, William Statsky, ed., 1985, at p. 656. Taking the meaning of "residential" into account, the meaning of "residential areas" is "areas suitable for residences." This plain meaning of the statutory language is unambiguous, and, therefore, no additional consideration of the regulatory framework or legislative intent is required or permitted. This plain language definition of "residential areas" should not be rejected, because it leads to a workable and sensible reading of Conn. Gen. Stat. § 16-50p@(3) and 16-50p(h).

The statutory mandate to avoid siting 345-kV overhead transmission lines near residential areas is entirely workable, given the definition of "residential areas" described above. The Siting Council need not wonder about what areas are, in fact, suitable for

residences, because the determination of such suitability has been delegated by statute to Connecticut's municipalities. *See* Conn. Gen. Stat. § 8-2 (granting municipalities the authority to determine what land within their bounds shall be zoned suitable for residences). Municipal zoning regulations are generally the primary source considered by the courts to determine if land may be used for a particular residential purpose. *See, e.g., Builders Service Corp. v. Planning and Zoning Commission*, 208 Conn. 267 (1988) (review of East Hampton's residential zoning regulations). Therefore, if land is zoned residential per the regulations of the municipal authority, it would be deemed suitable for a residence or residences. That said, any land zoned residential would be a "residential area" within the meaning of Conn. Gen. Stat. § 16-50p.

As established on the record of this docket, that land owned by Linda D. Wilson and the South Main Street Irrevocable Trust (the "Wilsons"), which would be essentially bisected by the 345-kV transmission line were the Royal Oak Bypass to be employed, is zoned residential. See Wilson Exhibit 3 and Wilsons' Proposed Findings of Fact 1 – 5. Moreover, the Wilsons' property along the Proposed Royal Oak Bypass in Middletown is currently undergoing the municipal approval process for a subdivision development. See Wilson Exhibit 5 (overlay admitted on 1/19/05); Hrg. Tr. 1/19/05, Testimony of Ralph Wilson, at 61-63. Furthermore, that real property is taxed as residential property. Hrg. Tr. 1/19/05, Testimony of Ralph Wilson, at 67-68. Accordingly, the record establishes that the Wilsons' real property in Middletown, which would be impacted by a substantial portion of the Proposed Royal Oak Bypass, is considered and treated as residential by the Town of Middletown.

Even if the Council were to consider the term "residential areas" ambiguous, despite its plain meaning, any interpretation that would limit the phrase to existing structures would not be consistent with the purposes of the legislation, as evidenced by the legislative history. Two chief concerns were enunciated by the legislature and by those who spoke on the record during the hearings on the legislation that became enacted as Public Act 04-246. These were the potential health risks feared to result from exposure to EMFs, and the negative impact on the value of real property that occurs when high voltage overhead lines are installed nearby. Both of these concerns were voiced before the legislature's Energy and Technology Committee by Lynn Stanwood of the Royal Oak subdivision in Durham. *See* Energy & Technology Committee Hearing, Feb. 26, 2004, at 551-52. Senators Fasano and Aniskovich also recognized the dual concerns of impacts on health and property values as necessitating the presumption for undergrounding high voltage transmission lines adjacent to residential areas. *See* id., at 567, 492.

Both of the concerns that led to the adoption of Public Act 04-246 apply equally to residential areas that are already developed and those that have not yet been developed. Whether or not a residence is yet built, the potential health risks to children, as well as the impact upon the salability of the real property would similarly affect residential land. The statute does not distinguish between the last vacant lot in a subdivision and the first lot to be developed. The only way to read the statute to protect the interests involved is to read

residential areas to include all land zoned residential. Any other reading would severely hamper the statute by capping the benefit of the statute to those residences already built.⁵

Based upon the foregoing, the Siting Council should deem the Wilsons' real property in Middletown along the Proposed Royal Oak Bypass to be a residential area.

IV. Statutory Construction of the Term Technologically Feasible.

Again, the Siting Council has the task of performing statutory construction in interpreting the term "technologically feasible" as employed by the legislature in Conn. Gen. Stat. § 16-50p(h). As in the interpretation of "residential areas," the *plain meaning* of the statutory language must govern the Council's analysis. Pertaining to the present docket, there has been substantial speculation as to the implications of the word "feasible," and some would argue that the word itself imposes some heightened test of empirical evidentiary results pertaining to the application of a particular undergrounding technology, but this is in no way the meaning of the word "feasible."

The word "feasible" is defined as, "Capable of being accomplished (a feasible plan)." West's Legal Thesaurus/Dictionary, William Statsky, ed., 1985, at p. 316. The plain meaning of the statutory phrase "technologically feasible," therefore, is "capable of being accomplished technologically." Accordingly, if the record establishes that any means of undergrounding a 345-kV transmission line is capable of being accomplished in residential areas adjacent to any

⁵ Also, consider the bizarre impact of adoption of the Attorney General's proposed and ill-conceived definition of "residential areas" upon a property owner who, with appropriate approvals, razes a residence in order to erect new construction. If the Siting Council were to render a decision while no residence were in place on such a parcel, the Attorney General's definition would require the Council to deem that land as not a residential area (unless the Council were to, at that time, develop some special exception to the Attorney General's proposed definition).

proposed route, such a technology should be utilized in order to maintain compliance with the Siting Council's statutory authority. Conn. Gen. Stat. § 16-50p(h). Also, recognize that "feasible" only refers back to the preceding word "technologically;" therefore, the sole test for determining whether the Applicants have met their statutory burden in rebutting the presumption for undergrounding, is whether they have established that undergrounding technology is not capable of performing the task. The legislature has eliminated any other test from this consideration in § 16-50p(h). As it is the Applicants' burden to establish the lack of feasibility, raising a doubt as to feasibility would not carry the day for the Applicants, and undergrounding in residential areas (as well as in relation to the other statutory facilities described § 16-50p(h)) must occur unless the alternative technology were proven incapable of the task.

As it pertains to the Wilsons' real property in Middletown ,which would be impacted by the 345-kV transmission line if run along the Proposed Royal Oak Bypass (and the Existing Royal Oak Easement), the record demonstrates that undergrounding of that transmission line would be required in that location. Both XLPE cable and GITL have been established as feasible technologies, especially along the relatively short span of the Proposed Royal Oak Bypass or the Existing Royal Oak Easement. CL&P Exhibit 96; Hrg. Tr. 1/19/05, Testimony of Dr. Boggs, at 78, 111-13. Even in light of the ongoing disputes over capacitance and the ability to bury additional cable, the testimony on the record establishes that GITL could accomplish the task of running underground through the Existing Royal Oak Easement without taxing the system. Hrg. Tr. 1/19/05, Testimony of Dr. Boggs, at 110. Accordingly, no

overhead 345-kV transmission line could be sited on the Wilsons' Middletown residential property (along the Proposed Royal Oak Bypass).

Any argument regarding the lack of this type of use in public of GITL technology does not go to whether the technology is capable of performing the task. That question was answered in the affirmative by the expert, Dr. Steven Boggs, as cited above. To read § 16-50p(h) as only applying to technologies with exceptionally analogous past applications would preclude Connecticut from truly advancing in this area of public health concern. The legislature has decided to pioneer this cause, despite substantial scientific evidence pointing to the harmlessness of EMFs; the Siting Council must accept the plain language of the statute, and implement this statutory standard, which will have the effect of forcing the utility companies in Connecticut to advance safer transmission line technologies. Furthermore, it is suggested that the Applicant has not provided sufficient information to evaluate its "assumed margin of safety" or the frequency of capacitance to cause a problem on the system. The answers to these questions could increase the availability of underground cable.

IV. Cost as a Factor in Evaluating Alternative Proposals.

The Siting Council should realize that the consideration of cost, when assessing a transmission line proposal, is only appropriate in evaluating overhead transmission line options. Conn. Gen. Stat. § 16-50p(a)(3)(D) directs, in relevant part, the Siting Council to assess "that the overhead portions, if any, of the facility are cost effective." The plain language of the statute, therefore, differentiates between an assessment of cost pertaining to overhead lines, and the lack of such a test when considering underground alternatives. This is consistent with the

remarks of Representative Backer when discussing the proposal that was enacted as Public Act 04-246, who stated that undergrounding high voltage transmission lines "will add millions, if not a hundred million dollars in cost, I don't have the exact figures." House Record, May 3, 2004, at 4378 (remarks of Rep. Backer). The legislature was well aware that undergrounding alternatives could easily incur a greater up front cost, but was also aware that undergrounding could be cost effective in the long term. As Attorney General Richard Blumenthal remarked at the hearings on this legislation, "Indeed in the long run, it may save money – more money to do so." Energy & Technology Committee Hearing, Feb. 26, 2004, at 515 (remarks of Atty. Gen. Richard Blumenthal). Accordingly, the legislature was well aware of cost issues when it enacted Public Act 04-246, and the fact that the legislature omitted any test for cost pertaining to underground high voltage transmission alternatives cannot be considered an unintended omission.

Moreover, with respect to the Wilsons' Parcel, the cost of undergrounding the transmission lines along the Existing Royal Oak Easement would be negligible with respect to the overall proposal. Cost should not be a consideration, but were the Siting Council to weigh costs, the cost impact of undergrounding the Durham/Middletown stretch of the current proposal would not be serious enough to require the abandonment of such technology, nor the abandonment of the Siting Council's statutory mandate.

VI. Conclusion.

In sum, both the environmental and economic considerations as demonstrated on the record do not support the use of the Proposed Royal Oak Bypass for construction of 345 kV transmission lines or underground cable.

Respectfully Submitted, LINDA D. WILSON and SOUTH MAIN STREET IRREVOCABLE TRUST, RALPH WILSON TRUSTEE

Thomas M. Armstrong, Esq.

Federal Bar Number ct03545

Reid & Riege, P.C.

One Financial Plaza, 21st Floor

Hartford, CT 06103

(860) 278-1150 - Telephone

(860) 240-1002 - Fax

Email: tarmstrong@reidandriege.com

Their Counsel

CERTIFICATION

I hereby certify that a copy of the foregoing was mailed, U.S. Mail, postage prepaid and sent via email to all parties and intervenors on the service list on this 16th day of March, 2005.

Thomas M. Armstrong



ROYAL OAK BY-PASS
MIDDLETOWN-NORWALK
345-KY TRANSMISSION LINE
CITY OF MIDDLETOWN
TOWNS OF DURHAM
AND MIDDLEFIELD

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in Norwalk, Connecticut : MARCH 11, 2005

<u>Linda D. Wilson, Allison Wilson, Ralph Wilson, & the South Main Street Irrevocable Trust's</u> Proposed Findings of Fact

Parties Linda D. Wilson and South Main Street Irrevocable Trust (collectively, the "Wilsons") hereby submit the following proposed findings of fact in Docket Number 272, currently before the Connecticut Siting Council.

The Wilson Parcel

- 1. Party Linda D. Wilson owns a fifty percent interest in a parcel of real property in the towns of Durham, Connecticut and Middletown, Connecticut (the "Wilson Parcel"). (Hrg. Tr. 1/19/05, Testimony of Ralph Wilson, at 34-35,).
- 2. Party South Main Street Irrevocable Trust holds a fifty percent interest in the Wilson Parcel. (Hrg. Tr. 1/19/05, Testimony of Ralph Wilson, at 34-35,).
- 3. Ralph Wilson is the Trustee of the South Main Street Irrevocable Trust, and his daughter, Allison Wilson, is the beneficiary of that trust. (Hrg. Tr. 1/19/05, Testimony of Ralph Wilson, at 34-35).
- 4. There is no existing electric utility easement or Right of Way in the Middletown portion of the Wilson Parcel. (Hrg. Tr. 1/19/05, Testimony of Ralph Wilson, at 79-80).
- 5. The Wilsons consider any intrusion by the Applicants onto the Middletown portion of the Wilson Parcel, as proposed as the "Royal Oak Bypass," which would avoid Durham's current Right of Way, by siting the transmission line in Middletown on the Wilson

Parcel, a situation that would entail eminent domain. (Hrg. Tr. 1/19/05, Testimony of Ralph Wilson, at 80).

Residential Area Involved

- 6. The Wilson Parcel is zoned as residential property. (Wilson Exhibit 3).
- 7. The Wilson Parcel is taxed as residential property. (Hrg. Tr. 1/19/05, Testimony of Ralph Wilson, at 67-68).
- 8. The Wilsons began the process of seeking subdivision approval for a 25 lot residential development in the Summer of 2004, and the Wilsons intend to develop that subdivision as planned. (Hrg. Tr. 1/19/05, Testimony of Ralph Wilson, at 61-63).
- 9. Employing the Royal Oak Bypass would Run transmission lines through the Wilson Parcel, essentially bisecting the proposed subdivision and would run across fourteen residential lots in the proposed twenty-five lot subdivision. (Wilson Exhibit 5 (overlay admitted on 1/19/05)).

The Existing Easement

- 10. There is an existing 125 foot wide electric utility easement or Right of Way in the Durham portion of the Wilson Parcel (the "Existing Easement") which is part of the Right of Way used for the existing overhead lines that extend through the Royal Oak subdivision. (Hrg. Tr. 1/19/05, Testimony of Ralph Wilson, at 79-80; Wilson Exhibit 2).
- 11. The Existing Easement is part of the current Durham Right of Way that runs through the Royal Oak subdivision, and which has two 115-kV transmission lines running overhead on two separate series of utility poles. (Application).
- 12. The Applicants proposed monopole construction would add a 345-kV transmission line to the two existing 115-kV transmission lines on the Existing Easement and the current Durham Right of Way, which would remove the separate utility poles that now support the 115-kV transmission lines, thus improving the aesthetics of the Existing Easement and the Durham Right of Way. (Application).
- 13. Utilizing the current Durham Right of Way would not impact any residential property not already in proximity to the existing power transmission lines. (Application).

Environmental Impact

14. The consolidation of transmission lines has been proposed, either underground or above ground along the Existing Easement and the current Durham Right of Way (Application, CL&P Exhibit 96) and these alternatives would represent technologically feasible means to avoid an environmental impact on the Wilson Parcel, and specifically upon the subdivision proposed on the Wilson Parcel. (Hrg. Tr. 1/19/05, Testimony of Dr. Boggs, at 112; Wilson Exhibit 1 (Prefiled Testimony of Dr. Boggs)).

Wetlands

- 15. The Wilson subdivision plan submitted to the town of Middletown contains conservation easements to protect the wetlands on the Wilson Parcel, wetlands which would be bisected and adversely impacted by employing the Royal Oak Bypass. (Hrg. Tr. 1/19/05, Testimony of Ralph Wilson, at 66-67; Wilson Exhibit 2 (Subdivision Plan); Wilson Exhibit 5 (overlay admitted on 1/19/05)).
- 16. Diverting power lines through the proposed Royal Oak Bypass on the Wilson Parcel would have a greater impact on wetlands than would running the lines along the Existing Easement and the current Right of Way through Durham. (Wilson Exhibit 5 (overlay admitted on 1/19/05)).
- 17. Diverting power lines through the proposed Royal Oak Bypass in the area near Route 17 would specifically and adversely impact a greater area of wetlands in comparison to the Existing Easement and the current Durham Right of Way. (Wilson Exhibit 5 (overlay admitted on 1/19/05)).

Line of Sight

- 18. The Wilson Parcel occupies a higher elevation than surrounding real property in contrast to the current Right of Way through Durham. (Wilson Exhibit 2; Wilson Exhibit 4).
- 19. The Wilson Parcel's elevation reaches 492 feet, which provides views of Hartford and Powder Ridge from the proposed subdivision. (Hrg. Tr. 1/19/05, Testimony of Ralph Wilson, at 69-70; Wilson Exhibit 2).
- 20. Any transmission lines and poles placed in the Royal Oak Bypass on the Wilson Parcel would negatively impact this line of sight, and thus, would have a significant negative impact upon the aesthetics of the proposed development and the community. (Wilson Exhibit 5 (overlay admitted on 1/19/05); Hrg. Tr. 1/19/05, Testimony of Ralph Wilson, at 69-70).

21. The current Right of Way through Durham has a line of sight already impacted by existing utility poles. (Application).

Length of Easement

22. The EMF, environmental, and aesthetic impacts of employing the discussed Royal Oak Bypass would be substantially greater than those involved in using the Existing Easement and the current Right of Way through Durham, because the Royal Oak Bypass is nearly one and one half times longer than the existing Right of Way in Durham. (Wilson Exhibit 5 (overlay admitted 1/19/05).

Deforestation

- 23. The Wilson Parcel is predominantly forest. (Wilson Exhibit 5 (overlay admitted on 1/19/05); Hrg. Tr. 1/19/05, Testimony of Ms. Bartoswewicz, at 115).
- 24. Running transmission lines along the discussed Royal Oak Bypass would require significant deforestation of the Wilson Parcel, clearing no less than a one hundred-twenty five foot swath through the existing wooded parcel, which would amount to a significant environmental impact. (Wilson Exhibit 5 (overlay admitted on 1/19/05)).
- 25. The Existing Easement and the current Right of Way through Durham already have a vegetative clearance for the existing overhead utility lines and not result in further destruction of natural resources. (Wilson Exhibit 5 (overlay admitted on 1/19/05); Application).

Direct Pecuniary Impact on Wilsons

- 26. Any re-location of high voltage lines outside of the existing Durham Right of Way and onto the Wilson Parcel, including the Royal Oak Bypass discussed in this docket, would drastically impact the value and utility of the property through the creation of a buffer zone through the proposed subdivision, and by forcing people to be fearful of purchasing the property. (Hrg. Tr. 1/19/05, Testimony of Ralph Wilson, at 101-02).
- 27. The Applicant's 345-kV transmission line Application, as proposed, would not affect any real property in Durham or Middletown not already in the vicinity of the two existing 115-kV overhead transmission lines in the Existing Easement and current Right of Way through Durham. (Application).

Applicants Above Ground and GITL Alternative

- The Applicants have identified several above ground alternatives that would preclude having to route transmission lines through the Royal Oak Bypass on the Wilson Parcel, and these are presented in the Application as well as in CL&P Exhibit 96. These alternatives would be routed along the Existing Easement and current Right of Way through Durham, which runs through the Royal Oak subdivision. (Application, CL&P Exhibit 96).
- 29. The 12-arm pole combination 345 kV, 115 kV split phase alternative identified as alternative number 5 in CL&P Exhibit 96 would not be a feasible option for the Middletown and Durham transmission line, because of the difficulty in maintaining that type of configuration. (Hrg. Tr. 1/19/05, Testimony of Dr. Boggs, at 112).
- 30. GITL is an available and feasible alternative to overhead lines and underground cable, which could be installed to run the length of the Existing Easement and current Durham Right of Way through the Royal Oak subdivision. (Hrg. Tr. 1/19/05, Testimony of Dr. Boggs, at 78).

GITL Properties

- 31. GITL has roughly half the capacitance of XLPE high voltage cable. (Hrg. Tr. 1/19/05, Testimony of Dr. Boggs, at 93).
- 32. With proper design and placement, GITL emits roughly one tenth the EMFs of XLPE high voltage cable. (Hrg. Tr. 1/19/05, Testimony of Dr. Boggs, at 95-96).
- 33. GITL is more efficient than underground cable, because one 345-kV GITL could take the full ampacity of the overhead line, whereas with buried cable, additional circuits would be required. (Hrg. Tr. 1/19/05, Testimony of Dr. Boggs, at 83-84).
- 34. GITL technology has been used and refined over the course of a longer period than XLPE transmission class high voltage cable. (Hrg. Tr. 1/19/05, Testimony of Dr. Boggs, at 92).
- 35. If two circuits of GITL were installed, this would provide 100 percent redundancy, permitting the second circuit to carry the entire load in the case of a failure without any outage whatsoever. (Hrg. Tr. 1/19/05, Testimony of Dr. Boggs, at 90).
- 36. GITL lines are reliable, with the locally available CGIT lines experiencing only 5 failures in 40,000 circuit meter years; in other words, for the roughly one kilometer circuit

through the Existing Easement and Durham Right of Way, this would predict one failure every 80 years. (Hrg. Tr. 1/19/05, Testimony of Dr. Boggs, at 90).

37. The Utilization of GITL along the Existing Easement through Durham and the Royal Oak subdivision would have a negligible impact on system capacitance; therefore, a GITL line of the length involved to go through the Existing Easement and current Right of Way through Durham would be feasible. (Hrg. Tr. 1/19/05, Testimony of Dr. Boggs, at 110).

GITL Installation

- 38. Several installation options are available to install GITL along the Existing Easement that runs through the Royal Oak subdivision and Existing Easement in Durham, Connecticut. (Hrg. Tr. 1/19/05, Testimony of Dr. Boggs, at 53).
- 39. GITL can be installed underground at a depth of 2 to 3 feet in a trench with a width between 10 feet and 15 feet depending upon how many phases were to be installed. (Hrg. Tr. 1/19/05, Testimony of Dr. Boggs, at 49).
- 40. Grating would cover the GITL trench, while at the same time providing for air circulation to maximize current carrying capacity. (Hrg. Tr. 1/19/05, Testimony of Dr. Boggs, at 50).
- 41. GITL can be successfully installed under roadways by using a variety of techniques, including backfilling with concrete and fly ash or employing a grate. (Hrg. Tr. 1/19/05, Testimony of Dr. Boggs, at 51).
- 42. The Applicants could reconductor one of the existing 115 kv lines with ACSR so that it could carry the entire current now being transmitted through those lines. This would permit removal of one set of the tower structures in the Existing Easement for installation of GITL. (Hrg. Tr. 1/19/05, Testimony of Dr. Boggs, at 53-56).
- 43. If the Applicants reconductor one the existing 115 kv transmission lines in the Existing Easement, the Applicants could install GITL in a trench situated in or near the center of that existing Right of Way. (Hrg. Tr. 1/19/05, Testimony of Dr. Boggs, at 55-56).
- 44. A local vendor, CGIT, specializes in making long runs of GITL. (Hrg. Tr. 1/19/05, Testimony of Dr. Boggs, at 58).
- 45. Siemens also makes a good GITL product. (Hrg. Tr. 1/19/05, Testimony of Dr. Boggs, at 58).

Respectfully Submitted, LINDA D. WILSON and SOUTH MAIN STREET IRREVOCABLE TRUST, RALPH WILSON TRUSTEE

Thomas M. Armstrong, Esq.

Federal Bar Number ct03545

Reid & Riege, P.C.

One Financial Plaza, 21st Floor

Hartford, CT 06103

(860) 278-1150 - Telephone

(860) 240-1002 - Fax

Email: tarmstrong@reidandriege.com

Their Counsel

CERTIFICATION

I hereby certify that a copy of the foregoing was mailed, U.S. Mail, postage prepaid and sent via email to all parties and intervenors on the service list on this 11th day of March, 2005.

Thomas M. Armstrong