

STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

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March 14, 2005

The Honorable Richard Blumenthal Attorney General 55 Elm Street Hartford, Connecticut 06106

RE: DOCKET NO. 272 - The Connecticut Light and Power 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 Norwalk Substation in Norwalk, Connecticut.

Dear Attorney General Blumenthal:

The Council is in receipt of your most recent correspondence, dated March 8, 2005, in which you express concern that the Connecticut Siting Council (Council) may have improperly received input with regard to its efforts to update its Electric and Magnetic Field Best Management Practices (Practices). You also express interest insofar as KEMA, the Council's independent consultant in this proceeding, having allegedly "reversed its position" on the question of whether additional underground construction is technologically feasible in connection with the above-referenced proceeding. We thank you for this opportunity to respond to your concerns, as well as your continued interest in this highly important case.

With regard to the first matter, you express concern that the Council may have violated Conn. Gen. Stat. § 4-181 (a) and (c). The relevant portions of the statute are as follows:

(a) Unless required for the disposition of ex parte matters authorized by law, no hearing officer or member of an agency who, *in a contested case*, is to render a final decision or to make a proposed final decision shall communicate, directly or indirectly, in connection with any issue of fact, with any person or party, or in connection with any issue of law, with any party or the party's representative, without notice and opportunity for all parties to participate.

. . .

(c) Unless required for the disposition of ex parte matters authorized by law, no party or intervener *in a contested case*, no other agency, and no



other person who has a direct or indirect interest in the outcome of the case, shall communicate, directly or indirectly, in connection with any issue in that case, with a hearing officer or any member of the agency, or with any employee or agent of the agency assigned to assist the hearing officer or members of the agency in such case, without notice and opportunity for all parties to participate in the communication.

Conn. Gen. Stat. § 4-181 (emphasis added).

The communications in question were in connection with the Council's actions to update its Practices, pursuant to Conn. Gen. Stat. § 16-50t (c). The Council notes that these statutory provisions read as follows:

(c) The council shall adopt, and revise as the council deems necessary, standards for best management practices for electric and magnetic fields for electric transmissions lines. Such standards shall be based on the latest completed and ongoing scientific and medical research on electromagnetic fields and shall require individual, project-specific assessments of electromagnetic fields, taking into consideration design techniques including, but not limited to, compact spacing, optimum phasing of conductors, and applicable and appropriate new management technologies. Such standards shall not be regulations for purposes of chapter 54.

Conn. Gen. Stat. § 16-50t (c) (emphasis added).

It is important to note that the passage of Conn. Gen. Stat. § 16-50t (c) did not serve to create the Practices; they pre-existed the statute. Indeed, the Council first adopted the Electric and Magnetic Field Best Management Practices on February 11, 1993, on its own initiative. To facilitate a better understanding of the nature of the Council's Practices and their role in the Siting Council process, I wish to provide for you the following cursory review of the history behind the formulation and development of these Practices.

The Council first proposed the concept of Electric and Magnetic Field Best Management Practices in November 1992. On November 3, 1992, the Council sent a letter to all Connecticut Electric Utilities in which it stated, in part, the Council "...is considering a conservative approach to the issue by adopting Best Management Practices which would reduce exposure to the generation, transformation, and transmission of electricity. These practices do not include new burdens or regulations for utilities, but rather reflect conditions and orders already imposed by the Council in previous dockets in which electromagnetic fields were an issue. Enclosed for your review is a list of Electromagnetic Fields Best Management Practices, as proposed by the Council. The Council welcomes your comments and advice on these Best Management Practices."

On November 30, 1992, the Council received four pages of comments from United Illuminating. The Council received four pages of comments from Northeast Utilities (NU) on November 25, 1992 and one page of comments from NU on January 5, 1993. The closing text of the 1992 and 1993 comments stated "If you have any questions about these suggested changes, please have the staff call Mr. Robert E. Carberry at 665-6774."

During this period of time Mr. Carberry was a member of the EMF Advisory Committee to the Inter-Agency Task Force on EMF, created by the Legislature in 1991. Mr. Joel Rinebold, the Council's then Executive Director, and Robert Erling of the Council staff, were also on the Task Force.

The Council also received comments from Barry S. Zitser, writing in the capacity as a member of the public, on November 17, 1992, and two pages of comments from the City of Groton Public Utilities on November 25, 1992. Draft copies of the Best Management Practices had been sent to those utilities which annually file a Forecast Report with the Council, as well as those state agencies represented on the EMF Inter Agency Task Force, namely, the Department of Health Services, Department of Environmental Protection, Department of Public Utility and Control, Department of Consumer Protection, Office of Policy and Management, and the Department of Economic Development for comment.

Notably, no questions or objections to this process, or to the Best Management Practices themselves, were filed in 1993, or in the 12 years since their adoption by the Council.

The Council also notes that the language in P.A. 04-246, AN ACT CONCERNING ELECTRIC TRANSMISSION LINE SITING CRITERIA, regarding what should be contained in the Council's Practices is identical (verbatim) to the Council's own document, which was originated, developed and adopted by the Council itself in 1993. Thus, the Council is firmly of the view that the creation of, and any revision to, the Practices is independent of the above-referenced proceeding, Council Docket No. 272, and thus not part and parcel of that proceeding. Moreover, given that the Practices apply to all electric transmission lines generically, it would be improper to treat their revision as part of any particular docket, including Council Docket 272.

Still, having established that the Practices were and remain separate from Council Docket No. 272, and were, in any event, meant only to be a guide for all electric transmission dockets (including all regulated voltages – not only 345 kV and higher), the Council recognizes that it is thoroughly prudent and appropriate to also examine whether Conn. Gen. Stat. § 4-181 is applicable to the subject proceeding, relative to the question of exparte communications.

The Council notes that Conn. Gen. Stat. § 4-166 defines the term "contested case" as meaning "a proceeding, . . . , in which the legal rights, duties or privileges of a party are required by state statute or regulation to be determined by an agency after an opportunity for a hearing or in which a hearing is in fact held," The legislature did not require

that a hearing be held in connection with its requirements regarding the revision of the subject Practices. Accordingly, it is clear that the Council's actions related to the statutory requirements regarding revision of the Practices do not constitute a contested case. [See Summit Hydropower Partnership v. Commissioner of Environmental Protection, 226 Conn. 792, 629 A.2d 367 (1993); Reynolds v. Department of Public Utility Control, 48 Conn. Supp. 188, 196-197, 835 A.2d 134 (2001), affirmed, 266 Conn. 606, 834 A.2d 58 (2003).]

Consequently, Conn. Gen. Stat. § 4-181 (a) and (c) is not applicable in this matter. Moreover, the Council further notes that the General Assembly explicitly did <u>not</u> require the procedures associated with regulations to be made applicable to these updated and/or revised Practices.

Nevertheless, the Council welcomes this opportunity to thoroughly respond to your concerns and to set the record straight. To that end, we have assembled the following information in connection with our efforts to fully and completely respond to your questions.

On or about December 22, 2004, Council staff members Robert Mercier and Robert K. Erling spoke by telephone to Connecticut Light & Power (CL&P) engineer Robert Carberry, pursuant to the Council's desire to seek technical corrections and comments from those who had commented during the initial creation of the EMF BMP. (Please note that this is the same Robert Carberry who had commented on the original EMF BMP.

The following is a complete list of the corrections that were made to the draft as a result of the discussion between Council staff and Mr. Carberry:

- 1. Throughout the document the term "EMF" was changed to "MF" because the document was concerned with magnetic fields.
- 2. On page one, the word "for" was added to the first sentence.
- 3. On page one, the word "dissipate" was deleted and the word "attenuate" was substituted.
- 4. On page 2, the date corresponding to the NIEHS document was correctly changed to 1999, rather than 1998.
- 5. On page 4, the word "Electric" was changed to "Electrical" and the word "developed" was changed to "published" in the second sentence under the heading Buffer Zones.
- 6. On page 4, under the heading Buffer Zones, in the third paragraph, the words, "if the line were to operate at its highest" were substituted for the words "when the line is".
- 7. On the last sentence of the fourth paragraph on page 5 under the heading Conductor Separation the words "during high winds" were removed from the fourth sentence and the words "at all times" substituted.

- 8. On page 5, under the heading Distance, in the second paragraph, the second sentence, "transmission lines" was substituted for "EMF fields".
- 9. Under the heading Vertical Configuration the sentence "Vertical spacing allows for conductors to be placed in a vertical plane higher above ground thus causing a cancellation effect on the EMF emissions of from (sic) each conductor as measured from the ground" was removed. In the second sentence, the word "wider" was substituted for "wide".
- 10. Under the heading Optimum Phasing in the second sentence, the phrase "or a bundle of conductors" was added, and the word "line" was added after "transmission".
- 11. Under the heading Underground Installation, in the second sentence, the words "filled with insulating gases or fluids" was omitted from that sentence because the cable itself is not filled with gases or fluids.

Notwithstanding the fact that Conn. Gen. Stat. § 4-181 does not apply to the Council's actions to update its Practices, the Council fully appreciates the need for transparency in these matters. With that principle in mind, the Council notes that if Conn. Gen. Stat. § 4-181 were found to be applicable, such an agency has the obligation to present to any reviewing court the substance of the communication in order that the reviewing court can determine if the communications were prejudicial to any party. [See *Henderson v. Department of Motor Vehicles*, 202 Conn. 453, 459, 521 A.2d 1040 (1987).] To that end enclosed please find sworn affidavits of both Mr. Erling and Mr. Mercier. Please be advised that the Council intends to enter this reply into the record of the above-referenced proceeding (Docket 272), as well as your letter to us of March 8, 2005, and the associated affidavits of Messrs. Erling and Mercier.

In summary, the Council believes that the subject changes were not substantive and were instead changes in form and, in any event, were not prejudicial to any party or intervener in this proceeding. Moreover, the Council notes that the revision of the Council's Practices did not constitute either a part of the Docket No. 272 contested case proceeding, or an independent contested case, and thus is not subject to the cited provisions of Conn. Gen. Stat. § 4-181.

Finally, the Council wishes to address your concerns regarding the role of its independent consultant, KEMA, in this proceeding. You have indicated that you believe KEMA has effectively changed its position with regard to the feasibility to build more of the transmission line underground than was proposed by the applicant. I am pleased to respond to your inquiry.

In KEMA's October 18, 2004 report on harmonic impedance analysis, KEMA concluded that approximately ten to twenty additional miles of underground construction may be possible. However, KEMA also stated that because of the large amount of capacitance on the electric grid due to underground cables, a transient network analysis (TNA) would be required to evaluate transient characteristics and temporary over-voltages.

On December 21, 2004, the Reliability and Operability Committee (ROC) submitted a report on the technical feasibility of maximizing an underground transmission line in southwest Connecticut. This report contained the TNA studies called for by KEMA in their October 18, 2004, report.

On January 18, 2005, KEMA summarized "that the supporting data and analyses" presented and discussed in the ROC Final Report "do not confirm that additional amounts of transmission undergrounding necessarily lead to unacceptable overvoltages." KEMA further stated "No further optimization was done for the C-Type filter alternative"...nor were any "mitigation options using other types of passive filters" investigated to extend feasible undergrounding beyond 24 miles. Accordingly, KEMA (via the Council) asked that the applicants provide appropriate data to support their conclusions that additional underground construction will likely lead to unacceptable overvoltages.

In response to KEMA's observation of the ROC Final Report and the Council's request to do so, the Applicant's consultant, EnerNex, provided in-depth data on February 14, 2005 via a report that concluded that ten to 20 miles of additional undergrounding would not be technologically feasible. Moreover, GE Energy, on behalf of the applicants, modeled location and design of C-Type filters resulting in the potential for significant reductions in temporary overvoltages (TOVs).

To be clear, KEMA indicated that it continued to believe that additional underground construction beyond 24 miles may be technologically feasible if such mitigation is employed. However, KEMA agreed with the Applicant that there is little (if any) past industry experience in using C-Type filters to mitigate TOVs in order to be sufficiently certain that the use of such filters will not add unacceptable risk in the operability of the transmission grid. Thus, based on further analyses of the transient network analyses – conducted by the Applicant and its consultants – KEMA indicated its agreement that the technical and operational feasibility of additional undergrounding cannot presently be confirmed to be technologically feasible until more experience is gained by the utility industry.

The Council wishes to assure you, Mr. Blumenthal, that the Council instructed KEMA – and for that matter all participants in the subject proceeding – that all communications in this proceeding needed to be directed through the Council. The Council has inquired of KEMA as to whether they were ever contacted directly by the applicants or any of the applicant's consultants in connection with any matter directly related to the merits of this proceeding and they have stated, unequivocally, that they have not. Conversely, KEMA has assured the Council that no such communications were initiated. Simply put, the only time that parties and intervenors had direct access to KEMA was on the official record during the hearing process and during the more informal technical meeting on February 14, 2005.

We wish to reiterate, as is reflected in the record of this proceeding, that KEMA's representatives provided a full engineering explanation for their revised conclusions, both

in the technical meeting of February 14, 2005 and in the subsequent Council hearing of February 17, 2005, where KEMA was subject to cross examination. The Council believes that any fair reading of the transcripts of these events illustrates that KEMA did not, in fact, "reverse its position;" rather, KEMA made clear that its analyses were always conditioned and qualified upon certain specific evidence and was consistent in its statements to this effect. Transcripts of both events are available for public inspection and are available to all parties and intervenors.

I trust that this correspondence is responsive to your concerns and I again wish to communicate the sincere appreciation of the Council for providing us this opportunity to respond to you in this manner.

Very truly yours,

Pamela B. Katz, P.E.

Samel & Kath

Chairman

encs.

PBK/SDP/laf

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c: Service List

Robert L. Marconi, Esq. (AAG)



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NOTICE OF SERVICE

I hereby affirm that a photocopy of this document was sent to each Party and Intervenor on the service list dated January 26, 2005.

Dated: March 14, 2005

Lisa Fontaine

Custodian of Docket No. 272



AFFIDAVIT OF ROBERT K. ERLING

I, ROBERT K. ERLING, do hereby swear and state the following:

- 1. I am employed by the State of Connecticut Siting Council (hereinafter "Council" or "CSC"), 10 Franklin Square, New Britain, Connecticut 06051, in the position of Supervising Siting Analyst, and have been so employed since 1983.
- 2. In 1992 and 1993, I was assigned, among other duties, to work on the CSC's Electric and Magnetic Field Best Management Practices. The Council adopted Electric and Magnetic Field Best Management Practices ("EMF BMP") on February 11, 1993 on its own initiative. The Council first proposed the concept of Best Management Practices in November 1992. On November 3, 1992, the Council sent a letter to all Connecticut Electric Utilities in which it stated the Council "…is considering a conservative approach to the issue by adopting Best Management Practices which would reduce exposure to the generation, transformation, and transmission of electricity. These practices do not include new burdens or regulations for utilities, but rather reflect conditions and orders already imposed by the Council in previous dockets in which electromagnetic fields were an issue. Enclosed for your review is a list of Electromagnetic Fields Best Management Practices, as proposed by the Council. The Council welcomes your comments and advice on these Best Management Practices."
- 3. On November 30, 1992, the Council received four pages of comments from United Illuminating. On November 25, 1992, the Council received four pages of comments from Northeast Utilities and one page of comments from NU on January 5, 1993. The conclusions to those 1992-1993 comments noted, "If you have any questions about these suggested changes, please have the staff call Mr. Robert E. Carberry at 665-6774." Carberry was a member of the EMF Advisory Committee to the Inter-Agency Task Force on EMF, an organization created by the Legislature in 1991. Mr. Joel Rinebold, the Council's Executive Director, and Robert Erling of the Council staff, were also on the Task Force. The Council also received comments from Barry S. Zitser on November 17, 1992, and two pages of comments from the City of Groton Public Utilities on November 25, 1992. Draft copies of the Best Management Practices had been sent to those utilities which annually file a Forecast Report with the Council, as well as those state agencies represented on the EMF Inter Agency Task Force, namely, the Department of Health Services, Department of Environmental Protection, Department of Public Utility and Control, Department of Consumer Protection, Office of Policy and Management, and the Department of Economic Development for comment. No questions or objections to this process, or to the Best Management Practices themselves, were filed in 1993, or in the 12 years since their adoption by the Council. The language in P.A. 04-246 regarding what should be in the contents of the Council's Best Management Practices was apparently taken verbatim from the Council's own document, which was originated, developed and adopted by the Council itself in 1993.

- 4. During the week of December 20, 2004, I and fellow Council staff member Robert Mercier spoke by telephone to Connecticut Light & Power (CL&P) engineer Robert Carberry, pursuant to the Council's desires to seek any technical corrections or comments from those who had commented earlier during the initial creation of the EMF BMP. The contact with Carberry was for any technical corrections. This is the same Robert Carberry who had commented on the original EMF BMP. As a result of that one discussion with Carberry, the following technical corrections were added to the draft:
- a) Throughout the document the term "EMF" was changed to "MF" because the document was concerned with magnetic fields.
 - b) On page one, the word "for" was added to the first sentence.
- c) On page one, the word "dissipate" was deleted and the word "attenuate" was substituted.
- d) On page 2, the date corresponding to the NIEHS document was correctly changed to 1999, rather than 1998.
- e) On page 4, the word "Electric" was changed to "Electrical" and the word "developed" was changed to "published" in the second sentence under the heading <u>Buffer</u> Zones.
- f) On page 4, under the heading <u>Buffer Zones</u>, in the third paragraph, the words, "if the line were to operate at its highest" were substituted for the words "when the line is".
- g) On the last sentence of the fourth paragraph on page 5 under the heading <u>Conductor Separation</u> the words "during high winds" were removed from the fourth sentence and the words "at all times" substituted.
- h) On page 5, under the heading <u>Distance</u>, in the second paragraph, the second sentence, "transmission lines" was substituted for "EMF fields".
- i) Under the heading <u>Vertical Configuration</u> the sentence "Vertical spacing allows for conductors to be placed in a vertical plane higher above ground thus causing a cancellation effect on the EMF emissions of from (sic) each conductor as measured from the ground" was removed. In the second sentence, the word "wider" was substituted for "wide".
- j) Under the heading <u>Optimum Phasing</u> in the second sentence, the phrase "or a bundle of conductors" was added, and the word "line" was added after "transmission".

- k) Under the heading <u>Underground Installation</u>, in the second sentence, the words "filled with insulating gases or fluids" was omitted from that sentence because the cable itself is not filled with gases or fluids.
- 5. To the best of my knowledge, no other discussions were held with any other representatives of the utility industry by the CSC or its staff regarding the revisions to the EMF BMP.

STATE OF CONNECTICUT)	
)	Signed in the City of New Britain
COUNTY OF HARTFORD)	

I, ROBERT K. ERLING, do hereby swear that the above is true and correct to the best of my knowledge and belief.

Robert K. Erling

On this 11th day of March, 2005, ROBERT K. ERLING appeared before me, a Commissioner of the Superior Court, swore to the above and signed this AFFIDAVIT.

Robert L. Marconi

Commissioner of the Superior Court

Assistant Attorney General

Juris No. 404518

AFFIDAVIT OF ROBERT D. MERCIER

I, ROBERT D. MERCIER, do hereby swear and state the following:

- 1. I am employed by the State of Connecticut Siting Council (hereinafter "Council" or "CSC"), 10 Franklin Square, New Britain, Connecticut 06051, in the position of Environmental Analyst, and have been so employed since 2001.
- 2. In late November 2004, I was directed by S. Derek Phelps, Executive Director of the Council, to update the CSC's Electric and Magnetic Field Best Management Practices (EMF BMP) in accordance with P.A. 04-0246.
- 3. During the week of December 20, 2004, I and fellow Council staff member Robert Erling spoke by telephone to Connecticut Light & Power (CL&P) engineer Robert Carberry, pursuant to the Council's direction. The contact with Mr. Carberry was to discuss possible technical corrections to the EMF BMP. As a result of this discussion with Mr. Carberry, the following technical corrections were made to the draft EMF BMP:
- a) Throughout the document the term "EMF" was changed to "MF" because the document was concerned with magnetic fields.
 - b) On page one, the word "for" was added to the first sentence.
- c) On page one, the word "dissipate" was deleted and the word "attenuate" was substituted.
- d) On page 2, the date corresponding to the NIEHS document was correctly changed to 1999, rather than 1998.
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- f) On page 4, under the heading <u>Buffer Zones</u>, in the third paragraph, the words, "if the line were to operate at its highest" were substituted for the words "when the line is".
- g) On the last sentence of the fourth paragraph on page 5 under the heading <u>Conductor Separation</u> the words "during high winds" were removed from the fourth sentence and the words "at all times" substituted.
- h) On page 5, under the heading <u>Distance</u>, in the second paragraph, the second sentence, "transmission lines" was substituted for "EMF fields".

- i) Under the heading <u>Vertical Configuration</u> the sentence "Vertical spacing allows for conductors to be placed in a vertical plane higher above ground thus causing a cancellation effect on the EMF emissions of from (sic) each conductor as measured from the ground" was removed. In the second sentence, the word "wider" was substituted for "wide".
- j) Under the heading <u>Optimum Phasing</u> in the second sentence, the phrase "or a bundle of conductors" was added, and the word "line" was added after "transmission".
- k) Under the heading <u>Underground Installation</u>, in the second sentence, the words "filled with insulating gases or fluids" was omitted from that sentence because the cable itself is not filled with gases or fluids.
- 4. To the best of my knowledge, no other discussions were held with any other representatives of the utility industry by the CSC or its staff regarding the revisions to the EMF BMP.

STATE OF CONNECTICUT)	
)	
)	Signed in the City of New Britain
)	
COUNTY OF HARTFORD)	

I, ROBERT D. MERCIER, do hereby swear that the above is true and correct to the best of my knowledge and belief.

Robert D. Mercier

On this 11th day of March, 2005, ROBERT D. MERCIER appeared before me, a Commissioner of the Superior Court, swore to the above and signed this AFFIDAVIT.

Robert L. Marconi

Commissioner of the Superior Court

Assistant Attorney General

Juris No. 404518