

RECEIVED  
FEB - 9 2007

STATE OF CONNECTICUT  
CONNECTICUT SITING COUNCIL

BEST MANAGEMENT  
PRACTICES FOR ELECTRIC  
AND MAGNETIC FIELDS

:  
:  
:

CONNECTICUT  
SITING COUNCIL  
PETITION

FEBRUARY 9, 2007

**COMMENTS OF RICHARD BLUMENTHAL, ATTORNEY  
GENERAL FOR THE STATE OF CONNECTICUT**

Richard Blumenthal, Attorney General for the State of Connecticut (“Attorney General”), hereby files his Comments regarding the Joint Filing of Proposed Revised Best Management Practices submitted in this proceeding on February 1, 2007 by the Connecticut Light and Power Company (“CL&P”), the United Illuminating Company (“UI”) and J. Robert Galvin, M.D., M.P.H., Commissioner of the State of Connecticut Department of Public Health (“DPH”) (hereinafter referred to as the “Joint Filing”).

**I. INTRODUCTION**

The best management practices (“BMP”) for electric and magnetic fields (“EMF”) that the Connecticut Siting Council (“Council”) adopts in this proceeding will likely govern the siting and construction of electric transmission lines built in Connecticut for many years to come. Accordingly, it is important that the Council adopt BMPs that will adequately protect the public health and safety.

The science regarding the health effects of EMF has not materially changed since the Council sited the massive Middletown to Norwalk 345 kV transmission line. The scientific evidence still demonstrates a link between EMF and childhood leukemia. During that siting proceeding, the public demanded changes to the transmission line application to protect children from the potential dangers presented by EMF. In response to that outcry, the legislature, the Council and the distribution companies heeded the

advice of DPH and took significant steps to reduce EMF exposure along the 70 mile route.

In stark contrast to the positive steps taken in that case, the Council has issued a number of draft EMF BMPs for comment in this proceeding, certain of which would have dramatically increased the EMF exposure levels when new transmission lines are sited. In response to the prior draft EMF BMPs that were considered in this proceeding, DPH and the companies have collaborated to develop an agreement that would better protect public health and safety. While the Joint Filing – adopting the so-called California model – is better than the Siting Council’s prior draft EMF BMPs, it contains flaws that must be corrected.

Specifically, the Joint Filing contemplates applicants designing transmission lines without any regard to EMF mitigation. Only after the transmission line is so-planned and proposed would adjustments be considered to reduce EMF, and then using only no cost or low cost measures and only up to a cost of four percent of the cost of the line. This approach puts the cart before the horse. Clearly, the first step that should be taken to improve the Joint Filing is to require applicants to design transmission lines in a manner that specifically mitigates EMF exposure. Attempting to address EMF mitigation after a line is fully planned and designed is neither logical nor cost-effective, as poorly designed lines could prove too costly or impossible to correct later.

In addition, the further protective steps to mitigate EMF levels that are contemplated by the Joint Filing should not be limited to “no cost” or “low cost” measures only. All reasonable mitigation measures should be available for consideration to protect public health and safety, regardless of whether one could describe them as

“low,” “medium” or “high” cost – particularly when the health and safety of children is at stake. Finally, the 4% benchmark proposed in the Joint Filing should be viewed as a target, not a hard cap that could prohibit measures necessary to protect public health and safety.

## **II. THE JOINT FILING**

In the Joint Filing, CL&P, UI and DPH propose that the Council adopt EMF BMPs that are based on California’s so-called “no cost and low cost” EMF mitigation policy. The California policy requires that the construction of new transmission facilities, or the upgrade of existing transmission facilities, include all no cost EMF mitigation measures and “provides a quantitative “benchmark” for “low cost” measures, which it defined as aggregate costs up to 4% of the total project cost, that would achieve a magnetic field reduction of 15% or more.” Joint Filing, 3. As applied in California, the 4% figure is not an absolute cap on spending, and the California PUC may consider “minor” increases above the 4% benchmark “if justified under unique circumstances, but not as a routine application in utility design guidelines.” Joint Filing, 4 (quoting CPUC Decision 93-11-013, Section 3.3.2, 10).

The EMF BMP proposed in the Joint Filing would apply the 4% benchmark that is used in California to fund low cost EMF mitigation measures. The 4% would be calculated as a percentage of the best estimate of the total cost of the project (transmission lines and related substations) during the certification proceeding. Joint Filing, 5. Like in California, the 4% would not be an absolute cap or absolute minimum that could be spent on EMF reduction. Rather, the Joint Filing states that:

[t]he Council will consider minor increases above the 4% benchmark if justified under unique circumstances, but not as a routine application. Any EMF

mitigation costs above the 4% benchmark should result in significant EMF mitigation to be justified, and the total costs should still remain relatively low.

Id. In addition, the cost of undergrounding done for purposes other than magnetic field mitigation would be included in the base project cost and not as part of the 4% mitigation spending. Id.

The 4% spending would be allocated to mitigate EMF in an order of priority that is consistent with Connecticut law as follows:

1. private or public schools, licensed child day care facilities, licensed youth camps or public playgrounds;
2. residential;
3. recreational;
4. commercial/industrial;
5. agricultural; and
6. undeveloped land.

Joint Filing, 4-5.

The Joint Filing also provides that the initial proposal for the construction of new electric transmission lines, and modifications to existing lines, shall involve good engineering designs with no specific consideration given to EMF mitigation, but which are readily amenable to design changes to reduce magnetic fields. Joint Filing, 6.

According to the Joint Filing:

[t]he Applicant will then evaluate and propose cost-effective changes to this base design to lower MF levels consistent with the policies described in Section III [of the Joint Filing] above. The Council has the option to retain a consultant to confirm that such initial base proposal and the proposed MF reduction strategies are consistent with these Best Management Practices. The cost of this third party review would be borne by the Applicant.

Id.

### **III. DISCUSSION**

The Joint Filing represents an improvement over the Council's previous draft EMF BMPs. The Attorney General respectfully submits, however, that the Council must amend portions of the Joint Filing in order to make sure that the EMF BMPs it adopts will adequately protect public health and safety.

#### **A. EMF BMP Should Require Low EMF Designs From the Start**

According to the Joint Filing:

[t]he initial base proposal shall involve good engineering designs that the Applicant would propose consistent with expectations of statutes, reliability criteria, and safety codes, with no specific consideration given to MF management, but which are readily amenable to design changes to lower MF.

Joint Filing, 6. (Emphasis added). The EMF BMP adopted by the Council should require applicants to plan, design and propose transmission lines in a manner that mitigates EMF from the start. The Council should not, as proposed in the Joint Filing, allow transmission lines to be planned without regard to EMF concerns.

Moreover, the Council should explicitly require applicants to utilize all no cost EMF mitigation measures available. This requirement is consistent with the California policy. In its decision in Docket No. 06-01-042 dated January 26, 2006 at page 15, the California Public Utility Commission stated that "no cost mitigation measures that currently exist, or which may result for the recommendations of the utility workshop ordered in this decision should always be applied in all locations, including undeveloped land." This requirement is appropriate because certain EMF mitigation measures can be implemented at no cost, such as the phasing of conductors in a low EMF pattern.

The Council should also remove any references to "low cost" mitigation measures in the EMF BMP. The use of the 4% guideline, as described herein, makes the "low"

cost restriction unnecessary and inappropriate. The focus should be on any and all EMF mitigation measures that are effective and protect public health and safety regardless of whether an applicant would or could label it low cost, medium cost or high cost. The Council should refrain from using subjective qualifiers, such as “low cost measures,” that could impede that goal, especially when the Joint Filing fails to define “low” cost measures, essentially leaving that decision to the applicants.

**B. The 4% Benchmark Should be Viewed as a Target, Not a Hard Cap**

The overriding purpose of adopting EMF BMP is to protect public health and safety. Thus, if the Council must allocate more than 4% of the total project cost to reduce EMF to levels that are adequate to protect public health and safety, the Council should have the full ability to do so.

The Joint Filing, however, contains language that will unduly limit the Council’s authority in this regard. Although the Joint Filing states that “[t]he 4% benchmark is not an absolute cap,” Joint Filing, 5, it goes on to say that “[t]he Council will consider “minor” increases above the 4% benchmark if justified under unique circumstances, but not as a routine application.” Id. (Emphasis added).

The Council should not adopt such limitations on its ability to exceed the 4% benchmark if it determines that such additional spending on EMF mitigation is necessary and appropriate to protect public health and safety. Rather, the Council should have full authority under its best management practices to adopt appropriate EMF mitigation measures, even if their costs exceed the 4% benchmark. Accordingly, the Attorney General respectfully suggests that the Council delete the word “minor” and the clause “if

justified under unique circumstances, but not as a routine application” from this section of the Joint Filing.

Bear in mind that there is no magic to the adoption of a 4% benchmark in Connecticut. It appears that the Joint Filing included a 4% benchmark level because that is what was done in California. California, however, arrived at this benchmark level after an extensive stakeholder process that gave that figure both legitimacy and broad-based support that state. No similar process has occurred in Connecticut.

Moreover, there is little, if any, convincing evidence on the record in this proceeding to suggest that a 4% benchmark will be sufficient to reduce MF to levels that are considered safe in Connecticut. In the comments filed by DPH in this proceeding on May 31, 2006, DPH recommended that the Council’s BMP’s include the following two-tiered screening levels:

- 10 mG screening level for those areas of the proposed transmission line that impact locations where children live or congregate, including schools, day care facilities, play grounds and parks; and

- 100 mG screening level for all other areas of the proposed transmission line. In testimony in this proceeding, DPH acknowledged 10mG is still relevant. (problem – DPH signed onto the Joint Filing, so this is weak).

DPH also indicated that the 10 mG figure continues to be relevant when evaluating the public health impacts of EMF. Transcript (“Tr.”) 216-217 (in which DPH stated its understanding that the implementation of the California policy has generally achieved EMF reductions to such levels in that state). In light of the uncertainty as to whether the application of a 4% benchmark in Connecticut will reduce EMFs to levels that are considered safe, the Council should have greater authority to exceed that

benchmark as necessary and appropriate to protect public health and safety than is currently contemplated in the Joint Filing.

Moreover, according to the Joint Filing, the 4% benchmark would be “calculated as a percentage of the best estimate of the total costs during the Certificate proceeding . . . .” Joint Filing, 5. The Council should make explicit that these costs will be updated during the siting proceeding to ensure that the 4% benchmark is determined based on the best estimate of the cost of the transmission lines and related substations that is actually approved, rather than the line that was initially proposed.

**C. The Council’s Ability to Use Consultants Should Not Be Limited**

Although the Joint Filing contemplates the Council’s ability to use consultants to assist in the application of this policy, the language concerning the use of consultants could be misconstrued to improperly limit that ability. The Joint Filing states that “[t]he Council has the option to retain a consultant to confirm that such initial base proposal and the proposed MF reduction strategies are consistent with these Best Management Practices.” Joint Filing, 6.

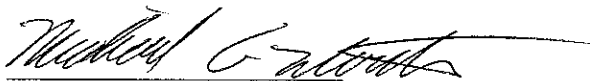
The Council’s ability to use consultants should not be limited in any way. The Council has the ability to hire consultants as it deems necessary, and its EMF BMP should not contain language that could be misinterpreted to limit that ability. In particular, the Council should have the ability to use consultants not only “to confirm that such initial base proposal and the proposed MF reduction strategies are consistent with these Best Management Practices,” but also to evaluate any issue that the Council deems appropriate, including whether the amounts used for EMF mitigation are fairly and appropriately allocated along the entire route.



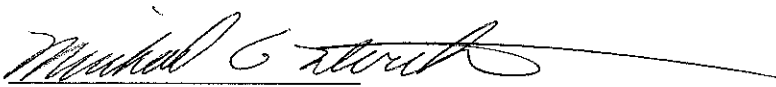
**WHEREFORE**, for the foregoing reasons, the Attorney General respectfully submits these Comments in this proceeding.

Respectfully Submitted,

RICHARD BLUMENTHAL  
ATTORNEY GENERAL

By:   
Michael C. Wertheimer  
Assistant Attorney General  
Attorney General's Office  
10 Franklin Square  
New Britain, CT 06051  
Tel: 860-827-2620  
Fax: 860-827-2893

Service is hereby certified to all parties and intervenors on this agency's service list for this proceeding.

  
Michael C. Wertheimer  
Assistant Attorney General  
Attorney General's Office  
10 Franklin Square  
New Britain, CT 06051  
Tel: 860-827-2620  
Fax: 860-827-2893