

2009
NATIONAL SOCIETY OF PROFESSIONAL ENGINEERS
MILTON F. LUNCH ETHICS CONTEST

INVITATION

All current NSPE individual members through their NSPE state societies and NSPE chapters (including student chapters) are invited to participate in the 2009 NSPE Milton F. Lunch Ethics Contest. Match your wits with experienced professional engineers and engineering students throughout the country!

WHAT IS TO BE DONE?

NSPE's Board of Ethical Review is furnishing you with a *real* FACT situation regarding the ethical obligations of an electrical engineer when a developer decides not to include a protective steel mesh in homes to be built in order to mitigate the occupants' exposure to interior levels of low-frequency electromagnetic fields (EMF). Given the FACTS, you are asked a QUESTION about the ethics of the engineer. Contestants are encouraged to read and discuss the FACTS of the case and answer to the QUESTION. Then contestants are to develop DISCUSSION AND CONCLUSIONS using the format of the NSPE Board of Ethical Review. Contestants are also to give REFERENCES citing only specific sections of the NSPE *Code of Ethics for Engineers*. Other materials should not be cited. (A copy of the NSPE *Code* and a sample BER case (demonstrating the format) are attached for reference. Contestants may also want to check the following Web sites for additional cases decided by the BER: www.nspe.org and www.niee.org).

CONTEST RULES

All entries must be 750 words or less (DISCUSSION and CONCLUSION sections only) and received by **Friday, April 17, 2009**. (List NSPE Code REFERENCES also. However, NSPE Code REFERENCES are not subject to word count). E-mail, fax, or mail entries to:

2009 NSPE Milton F. Lunch Ethics Contest
NSPE Legal Department
1420 King Street, Alexandria, VA 22314-2794
mcannon@nspe.org – E-mail ♦ 703-519-3763 – Fax ♦ 703-684-2840 - Phone
<http://www.nspe.org/Ethics/EthicsResources/MiltonLunch/index.html>

The winning entry will receive an award of \$1,000 (\$500 to the NSPE state society or NSPE chapter and \$500 divided among the authors) provided by NSPE and the NSPE Educational Foundation, a certificate, and recognition in **PE Magazine**.

JUDGING CRITERIA

The judges will use the following criteria:

- Quality of the entry in form and presentation. (Clarity, composition, expression, etc. are important. Your writing should be a finished piece, ready to “go to press.”)
- Demonstration of understanding of the implications concerning ethical or unethical behavior.
- Comprehensive analysis of the case and arguments supporting your conclusions. (This may include new thoughts about engineering ethics and professional practice.)

Good luck, fellow professional engineers and student engineers!

Sincerely,
MICHAEL L. SHIRLEY, P.E., F.NSPE
Chair, NSPE Board of Ethical Review

Milton F. ("Milt") Lunch, NSPE's general counsel from the 1940s until the 1980s was critical to the establishment of the NSPE Board of Ethical Review and the development of the NSPE Code of Ethics in the 1950s. During his tenure as NSPE general counsel, Milt presented numerous papers and authored influential articles about the importance of licensure, ethics, and professionalism. He passed away in 2001.

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(Fact Situation)

FACTS

A developer retains a contractor to design and build a residential subdivision near several high voltage power lines. Engineer A, an electrical engineer employed by the contractor, recommends to the contractor and developer to include a protective steel mesh in the homes to be built to mitigate occupants' exposure to interior levels of low-frequency electromagnetic fields (EMF). While Engineer A understands that in the United States there are no widely-accepted health and safety standards limiting occupational or residential exposure to 60-Hz EMF, he is aware of and concerned about certain scientific research concerning possible causal links between childhood leukemia and exposure to low-frequency EMF from power lines. Because of the added cost associated with the recommendation, the developer refuses to approve the recommendation. Contractor directs Engineer A to proceed in accordance with the developer's decision.

QUESTION

What are Engineer A's ethical obligations under the circumstances?

NSPE CODE REFERENCES

(To be submitted by the contestant(s). Use NSPE Code of Ethics references only.)

DISCUSSION

(To be submitted by the contestant(s). Use the BER format as used in the attached sample case.)

CONCLUSION

(To be submitted by the contestant(s).)

NOTE: *In order to maintain anonymity for purposes of judging, the actual body of the entry should not include any reference to the state society, chapter, member, student, university, or any other individual group(s) who submitted the entry. However, be sure to provide the name(s), address(es), email address(es), and phone number(s) of (1) your NSPE chapter or state society, and (2) each of the individual(s) responsible for submitting the entry, on a separate cover sheet accompanying your entry. Submissions failing to include this information will be returned to submitter(s) and will not be eligible for the contest.*

Code of Ethics for Engineers

Preamble

Engineering is an important and learned profession. As members of this profession, engineers are expected to exhibit the highest standards of honesty and integrity. Engineering has a direct and vital impact on the quality of life for all people. Accordingly, the services provided by engineers require honesty, impartiality, fairness, and equity, and must be dedicated to the protection of the public health, safety, and welfare. Engineers must perform under a standard of professional behavior that requires adherence to the highest principles of ethical conduct.

I. Fundamental Canons

Engineers, in the fulfillment of their professional duties, shall:

1. Hold paramount the safety, health, and welfare of the public.
2. Perform services only in areas of their competence.
3. Issue public statements only in an objective and truthful manner.
4. Act for each employer or client as faithful agents or trustees.
5. Avoid deceptive acts.
6. Conduct themselves honorably, responsibly, ethically, and lawfully so as to enhance the honor, reputation, and usefulness of the profession.

II. Rules of Practice

1. Engineers shall hold paramount the safety, health, and welfare of the public.
 - a. If engineers' judgment is overruled under circumstances that endanger life or property, they shall notify their employer or client and such other authority as may be appropriate.
 - b. Engineers shall approve only those engineering documents that are in conformity with applicable standards.
 - c. Engineers shall not reveal facts, data, or information without the prior consent of the client or employer except as authorized or required by law or this Code.
 - d. Engineers shall not permit the use of their name or associate in business ventures with any person or firm that they believe is engaged in fraudulent or dishonest enterprise.
 - e. Engineers shall not aid or abet the unlawful practice of engineering by a person or firm.
 - f. Engineers having knowledge of any alleged violation of this Code shall report thereon to appropriate professional bodies and, when relevant, also to public authorities, and cooperate with the proper authorities in furnishing such information or assistance as may be required.
2. Engineers shall perform services only in the areas of their competence.
 - a. Engineers shall undertake assignments only when qualified by education or experience in the specific technical fields involved.
 - b. Engineers shall not affix their signatures to any plans or documents dealing with subject matter in which they lack competence, nor to any plan or document not prepared under their direction and control.
 - c. Engineers may accept assignments and assume responsibility for coordination of an entire project and sign and seal the engineering documents for the entire project, provided that each technical segment is signed and sealed only by the qualified engineers who prepared the segment.
3. Engineers shall issue public statements only in an objective and truthful manner.
 - a. Engineers shall be objective and truthful in professional reports, statements, or testimony. They shall include all relevant and pertinent information in such reports, statements, or testimony, which should bear the date indicating when it was current.
 - b. Engineers may express publicly technical opinions that are founded upon knowledge of the facts and competence in the subject matter.
 - c. Engineers shall issue no statements, criticisms, or arguments on technical matters that are inspired or paid for by interested parties, unless they have prefaced their comments by explicitly identifying the interested parties on whose behalf they are speaking, and by revealing the existence of any interest the engineers may have in the matters.

4. Engineers shall act for each employer or client as faithful agents or trustees.
 - a. Engineers shall disclose all known or potential conflicts of interest that could influence or appear to influence their judgment or the quality of their services.
 - b. Engineers shall not accept compensation, financial or otherwise, from more than one party for services on the same project, or for services pertaining to the same project, unless the circumstances are fully disclosed and agreed to by all interested parties.
 - c. Engineers shall not solicit or accept financial or other valuable consideration, directly or indirectly, from outside agents in connection with the work for which they are responsible.
 - d. Engineers in public service as members, advisors, or employees of a governmental or quasi-governmental body or department shall not participate in decisions with respect to services solicited or provided by them or their organizations in private or public engineering practice.
 - e. Engineers shall not solicit or accept a contract from a governmental body on which a principal or officer of their organization serves as a member.
5. Engineers shall avoid deceptive acts.
 - a. Engineers shall not falsify their qualifications or permit misrepresentation of their or their associates' qualifications. They shall not misrepresent or exaggerate their responsibility in or for the subject matter of prior assignments. Brochures or other presentations incident to the solicitation of employment shall not misrepresent pertinent facts concerning employers, employees, associates, joint venturers, or past accomplishments.
 - b. Engineers shall not offer, give, solicit, or receive, either directly or indirectly, any contribution to influence the award of a contract by public authority, or which may be reasonably construed by the public as having the effect or intent of influencing the awarding of a contract. They shall not offer any gift or other valuable consideration in order to secure work. They shall not pay a commission, percentage, or brokerage fee in order to secure work, except to a bona fide employee or bona fide established commercial or marketing agencies retained by them.

III. Professional Obligations

1. Engineers shall be guided in all their relations by the highest standards of honesty and integrity.
 - a. Engineers shall acknowledge their errors and shall not distort or alter the facts.
 - b. Engineers shall advise their clients or employers when they believe a project will not be successful.
 - c. Engineers shall not accept outside employment to the detriment of their regular work or interest. Before accepting any outside engineering employment, they will notify their employers.
 - d. Engineers shall not attempt to attract an engineer from another employer by false or misleading pretenses.
 - e. Engineers shall not promote their own interest at the expense of the dignity and integrity of the profession.
2. Engineers shall at all times strive to serve the public interest.
 - a. Engineers are encouraged to participate in civic affairs; career guidance for youths; and work for the advancement of the safety, health, and well-being of their community.
 - b. Engineers shall not complete, sign, or seal plans and/or specifications that are not in conformity with applicable engineering standards. If the client or employer insists on such unprofessional conduct, they shall notify the proper authorities and withdraw from further service on the project.
 - c. Engineers are encouraged to extend public knowledge and appreciation of engineering and its achievements.
 - d. Engineers are encouraged to adhere to the principles of sustainable development¹ in order to protect the environment for future generations.

3. Engineers shall avoid all conduct or practice that deceives the public.
 - a. Engineers shall avoid the use of statements containing a material misrepresentation of fact or omitting a material fact.
 - b. Consistent with the foregoing, engineers may advertise for recruitment of personnel.
 - c. Consistent with the foregoing, engineers may prepare articles for the lay or technical press, but such articles shall not imply credit to the author for work performed by others.
4. Engineers shall not disclose, without consent, confidential information concerning the business affairs or technical processes of any present or former client or employer, or public body on which they serve.
 - a. Engineers shall not, without the consent of all interested parties, promote or arrange for new employment or practice in connection with a specific project for which the engineer has gained particular and specialized knowledge.
 - b. Engineers shall not, without the consent of all interested parties, participate in or represent an adversary interest in connection with a specific project or proceeding in which the engineer has gained particular specialized knowledge on behalf of a former client or employer.
5. Engineers shall not be influenced in their professional duties by conflicting interests.
 - a. Engineers shall not accept financial or other considerations, including free engineering designs, from material or equipment suppliers for specifying their product.
 - b. Engineers shall not accept commissions or allowances, directly or indirectly, from contractors or other parties dealing with clients or employers of the engineer in connection with work for which the engineer is responsible.
6. Engineers shall not attempt to obtain employment or advancement or professional engagements by untruthfully criticizing other engineers, or by other improper or questionable methods.
 - a. Engineers shall not request, propose, or accept a commission on a contingent basis under circumstances in which their judgment may be compromised.
 - b. Engineers in salaried positions shall accept part-time engineering work only to the extent consistent with policies of the employer and in accordance with ethical considerations.
 - c. Engineers shall not, without consent, use equipment, supplies, laboratory, or office facilities of an employer to carry on outside private practice.
7. Engineers shall not attempt to injure, maliciously or falsely, directly or indirectly, the professional reputation, prospects, practice, or employment of other engineers. Engineers who believe others are guilty of unethical or illegal practice shall present such information to the proper authority for action.
 - a. Engineers in private practice shall not review the work of another engineer for the same client, except with the knowledge of such engineer, or unless the connection of such engineer with the work has been terminated.
 - b. Engineers in governmental, industrial, or educational employ are entitled to review and evaluate the work of other engineers when so required by their employment duties.
 - c. Engineers in sales or industrial employ are entitled to make engineering comparisons of represented products with products of other suppliers.
8. Engineers shall accept personal responsibility for their professional activities, provided, however, that engineers may seek indemnification for services arising out of their practice for other than gross negligence, where the engineer's interests cannot otherwise be protected.
 - a. Engineers shall conform with state registration laws in the practice of engineering.
 - b. Engineers shall not use association with a nonengineer, a corporation, or partnership as a "cloak" for unethical acts.
9. Engineers shall give credit for engineering work to those to whom credit is due, and will recognize the proprietary interests of others.
 - a. Engineers shall, whenever possible, name the person or persons who may be individually responsible for designs, inventions, writings, or other accomplishments.
 - b. Engineers using designs supplied by a client recognize that the designs remain the property of the client and may not be duplicated by the engineer for others without express permission.
 - c. Engineers, before undertaking work for others in connection with which the engineer may make improvements, plans, designs, inventions, or other records that may justify copyrights or patents, should enter into a positive agreement regarding ownership.
 - d. Engineers' designs, data, records, and notes referring exclusively to an employer's work are the employer's property. The employer should indemnify the engineer for use of the information for any purpose other than the original purpose.
 - e. Engineers shall continue their professional development throughout their careers and should keep current in their specialty fields by engaging in professional practice, participating in continuing education courses, reading in the technical literature, and attending professional meetings and seminars.

Footnote 1 "Sustainable development" is the challenge of meeting human needs for natural resources, industrial products, energy, food, transportation, shelter, and effective waste management while conserving and protecting environmental quality and the natural resource base essential for future development.

As Revised July 2007

"By order of the United States District Court for the District of Columbia, former Section 11(c) of the NSPE Code of Ethics prohibiting competitive bidding, and all policy statements, opinions, rulings or other guidelines interpreting its scope, have been rescinded as unlawfully interfering with the legal right of engineers, protected under the antitrust laws, to provide price information to prospective clients; accordingly, nothing contained in the NSPE Code of Ethics, policy statements, opinions, rulings or other guidelines prohibits the submission of price quotations or competitive bids for engineering services at any time or in any amount."

Statement by NSPE Executive Committee

In order to correct misunderstandings which have been indicated in some instances since the issuance of the Supreme Court decision and the entry of the Final Judgment, it is noted that in its decision of April 25, 1978, the Supreme Court of the United States declared: "The Sherman Act does not require competitive bidding."

It is further noted that as made clear in the Supreme Court decision:

1. Engineers and firms may individually refuse to bid for engineering services.
2. Clients are not required to seek bids for engineering services.
3. Federal, state, and local laws governing procedures to procure engineering services are not affected, and remain in full force and effect.
4. State societies and local chapters are free to actively and aggressively seek legislation for professional selection and negotiation procedures by public agencies.
5. State registration board rules of professional conduct, including rules prohibiting competitive bidding for engineering services, are not affected and remain in full force and effect. State registration boards with authority to adopt rules of professional conduct may adopt rules governing procedures to obtain engineering services.
6. As noted by the Supreme Court, "nothing in the judgment prevents NSPE and its members from attempting to influence governmental action . . ."

Note: In regard to the question of application of the Code to corporations vis-a-vis real persons, business form or type should not negate nor influence conformance of individuals to the Code. The Code deals with professional services, which services must be performed by real persons. Real persons in turn establish and implement policies within business structures. The Code is clearly written to apply to the Engineer, and it is incumbent on members of NSPE to endeavor to live up to its provisions. This applies to all pertinent sections of the Code.



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Publication date as revised: July 2007 • Publication #1102

Facts:

Engineer A, a structural engineer, is retained by the defense attorney for an insurance company to evaluate damages to a structure owned by its insured, Mr. X. Eight months later, and without notice to the insurance company, Engineer A is retained by Mr. X. Engineer A provides a professional opinion completely different than the one provided to the insurance company.

Questions:

1. Was it ethical for Engineer A to agree to be retained by Mr. X?
2. Was it ethical for Engineer A to provide a professional opinion completely different than the one provided to the insurance company?

References:

Section II.3.	-	NSPE Code of Ethics:	Engineers shall issue public statements only in an objective and truthful manner.
Section II.4.	-	NSPE Code of Ethics:	Engineers shall act for each employer or client as faithful agents or trustees.
Section II.4.a.	-	NSPE Code of Ethics:	Engineers shall disclose all known or potential conflicts of interest that could influence or appear to influence their judgment or the quality of their services.
Section II.4.b.	-	NSPE Code of Ethics:	Engineers shall not accept compensation, financial or otherwise, from more than one party for services on the same project, or for services pertaining to the same project, unless the circumstances are fully disclosed and agreed to by all interested parties.
Section III.1.b.	-	NSPE Code of Ethics:	Engineers shall not promote their own interest at the expense of the dignity and integrity of the profession.
Section III.4.	-	NSPE Code of Ethics:	Engineers shall not disclose, without consent, confidential information concerning the business affairs or technical processes of any present or former client or employer, or public body on which they serve.
Section III.4.a.	-	NSPE Code of Ethics:	Engineers shall not, without the consent of all interested parties, promote or arrange for new employment or practice in connection with a specific project for which the Engineer has gained particular and specialized knowledge.
Section III.4.b.	-	NSPE Code of Ethics:	Engineers shall not, without the consent of all interested parties, participate in or represent an adversary interest in connection with a specific project or proceeding in which the Engineer has gained particular specialized knowledge on behalf of a former client or employer.

Discussion:

Engineers play an important role when they serve as an expert witness as part of the litigation process. Engineers provide the triers of fact and of law with important assistance in better understanding the many technical issues faced by those called upon to resolve the conflicts that arise during the litigation, arbitration, mediation, and settlement processes.

On several occasions, the NSPE Board of Ethical Review has had an opportunity to consider ethical cases relating to the role of individual engineers serving as expert witnesses on behalf of their clients. For example, in a case that is strikingly similar to the present case, BER Case No. 82-6, Engineer A was retained by the U.S. government to study the causes of a dam failure. Later, Engineer A was retained by the contractor on this project, who had filed a claim against the U.S. government for additional compensation. In finding that it was unethical for Engineer A to be retained as an expert witness for the contractor under these circumstances, the Board noted that as an expert witness, Engineer A would be required to state his opinion based upon his firsthand knowledge and on facts of record. There was a danger that Engineer A's opinions, based on his firsthand knowledge and his understanding of the facts of record, would touch upon privileged, specialized, and confidential knowledge gained while he was retained by the U.S. government. Indeed, he might be called upon to give an opinion as to the very facts with which he was involved as a consultant with the government. There can be no doubt that NSPE Code Section III.4.b. was enacted to prevent engineers from disclosing such information. For those reasons the Board found that it would be unethical for an engineer who was retained by the U.S. government to be retained as an expert witness for a contractor who filed a claim against the U.S. government for additional compensation.

Similarly, the Board is of the view that the facts in the present case are somewhat similar to those faced by the Board in Case No. 82-6, except for two basic issues. In the present case, under the facts, Engineer A improperly agreed to be retained by a second party on the very same matter for which Engineer A was retained by the first party who was in an adversarial relationship with the second party without the consent of the first party. However, to make matters worse, Engineer A then provided a professional opinion that was completely different than the professional opinion provided to the first party, the insurance company. Without new information, and there is no reason to believe there is any, an engineer cannot issue a contradictory report that is truthful and objective. These actions not only undermine the credibility of Engineer A, but also cast a poor reflection upon engineers everywhere. Engineer A, while retained by the insurance company, had access to the insurance company's confidential information, company documents and other information. In the opinion of the NSPE Board of Ethical Review, Engineer A's conduct was well beyond any acceptable standards of professional behavior and should be condemned for what it is - a serious violation of the NSPE Code of Ethics.

Conclusions:

1. It was unethical for Engineer A to agree to be retained by Mr. X without securing the permission of the insurance company, which he had not secured under the facts.
2. It was unethical for Engineer A to provide a professional opinion completely different than the one provided to the insurance company, unless additional facts are brought to light.