# **2010 NSPE BER Ethics Contest Cover Letter**

## (1) State Society:

Massachusetts Society of Professional Engineers TEN Post Office Square 8th Floor South Boston, MA 02109 617-692-2940

## (2) Author:

Daniel K. O'Brien, P.E., F.NSPE 222 Atwell Circle Marshfield, MA 02050-4220 617-660-7680 (W), 781-837-0667 (H)

dan.obrien@mwra.state.ma.us

## **2010 NSPE BER Ethics Contest Entry**

#### REFERENCES

Section I.5 - Code of Ethics: Avoid deceptive acts.

Section II.1.e - Code of Ethics: Engineers shall not aid or abet the unlawful practice of engineering

by a person or firm.

Section II.2.b - Code of Ethics: 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.

Section II.2.c - Code of Ethics: 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 by the qualified engineers who prepared

the segment.

Section III.7.a - Code of Ethics: 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.

Section III.9 - Code of Ethics: Engineers shall give credit for engineering work to those to whom

credit is due, and will recognize the proprietary interests of others.

#### **DISCUSSION**

In the current schedule-driven world of engineering, use of teams working on parallel tracks is not uncommon and as such the scenario presented here is very plausible. While Engineer A may have been "competent" to make the revisions in question, the NSPE Code of Ethics and the BER Case File would clearly classify his actions to be unethical as is argued below.

The facts establish that Engineer A did not consult with Engineer B regarding the particular revisions in question. The case is also silent on whether the two engineers had consulted at any time on design assumptions, shared calculations or had any other occasional contact that may have mitigated the action to some degree or established a threshold of "direction and control". In the absence of such prior collaboration, one must assume that none occurred.

Engineer A needed only to review the Fundamental Canons of the Code where under Section I.5, the Code instructs Engineers to "avoid deceptive acts". Making design changes to another's work without consultation is prohibited and could certainly be considered "a deceptive act". BER Case 02-02 provides parallels to this case in that one engineer made changes to another engineer's work without permission "to avoid a delay in distributing bid documents". In that instance, the Board found the offending engineer's actions to be unethical and stated that the actions represented "a basic disregard for the work product of another PE".

In both cases, pressure from management triggered the situation, but nonetheless that pressure should not have distorted the engineer's primary obligation under the Code. An argument could be made that Engineer A also violated Code Section II.1.e in that his actions "aided or abetted" the unlawful practice of engineering by his firm.

BER Case 94-6 also provides us with guidance from an instance that draws some parallels to the current case. In that situation, an engineer re-stamped the plans of another engineer who was no longer associated with the project. The Board ruled that this action was unethical and that engineers must "seek and obtain an engineer's consent before using the plans as a basis for one's services." In the 1994 case, there was also an issue of compensation in the mix, but the basic scenario of one engineer not being "available" when needed, does not constitute a valid reason to use his work without permission.

Another variation of the situation that was faced here occurs in BER Case 86-2 (which was clarified in later cases). In that case, there was an issue of the Chief Engineer in a large multi-person project stamping drawings not under his "direction and control". There were some elements of that case that are not applicable here, but the Board did reinforce Code Section II.2.c which does apply – "each technical segment is signed and sealed only by the qualified engineers who prepared the segment". Engineer A clearly ran afoul of this principle by revising the work of another preparer.

The findings in Case 86-2 were actually clarified later by the Board in two subsequent cases, namely 90-6 and 91-8. These cases dealt respectively with the evolving nature of engineering practice and whether it was appropriate to stamp designs that were prepared with a CADD system or a report where technicians were used to gather field information. The Board acknowledged that various team members and various sources of information collectively contribute to the final product. Both practices in these cases were eventually deemed acceptable, provided that the final engineering product was prepared under the "direction and control" of the stamping engineer.

Case 91-8 also urged reviewers to determine if a situation is consistent "with customary and prevailing practices within the engineering profession". Having multiple engineers work on a project is certainly customary. And had the current situation presented facts that some degree of peer review occurred between the two engineers including sharing and cross-checking of assumptions and calculations, we may have viewed the case differently - however, no such exchange was described.

Therefore, we conclude that Engineer A's actions, namely making changes to Engineer B's work without consultation, were unethical in this case.

## **CONCLUSION**

It was unethical for Engineer A to make changes to the design documents prepared and revised by Engineer B without consulting with Engineer B.