

## Report on a Case by the Board of Ethical Review

### Case No. 77-10

### Value Engineering—Contingency Fee

#### Facts:

John Doe, P.E., a principal in a consulting engineering firm, attended a public meeting of a township board of supervisors which had under consideration a water pollution control project with an estimated construction cost of \$7 million. Doe presented a so-called "cost-saving plan" to the supervisors under which his firm would work with the engineering firm retained for the project to find "cost-saving" methods to enable the township to proceed with the project and thereby not lose the federal funding share because of the township's difficulty in financing its share of the project.

Doe further advised the supervisors that his proposal contemplated providing his "cost-saving" services on the basis of being paid ten percent of the savings, but his firm would not be paid any amount if it did not achieve a reduction in the construction cost. Doe added that his firm's value engineering approach would be based on an analysis of the plans and specifications prepared by the design firm and that his operation would not require that the design firm be displaced.

#### Question:

Were Doe's presentation and offer consistent with the Code of Ethics?

#### Reference:

*Code of Ethics*-Section 11(d)-"An Engineer shall not request, propose, or accept a professional commission on a contingent basis under circumstances in which his professional judgment may be compromised, or when a contingency provision is used as a device for promoting or securing a professional commission."

#### Discussion:

In Case 69-2 we decided what on the face of it appears to be an almost identical issue, concluding that it was ethical for a firm to offer clients in the industrial field a value engineering service with payment based on a percentage of the savings achieved in the design or production mechanisms of the client. In that case the percentage of savings to be paid the engineering firm would be based on negotiation prior to the rendition of the value engineering service, and with the understanding that the client would have the unilateral right to not utilize the proposed changes. It is important to note that we based our conclusion, in part, on the understanding that under the prevailing facts the client was informed and competent to judge the proposed changes. Consequently, the engineering firm would have the incentive to avoid compromising its professional judgment.

Subsequently, in Case 76-11 we dealt with another related case in which a private engineering firm sought a contract to prepare an independent design for a major bridge to compare with an in-house design. The engineering firm offered to provide its services on the basis that it would not be paid if its design did not save the state the amount of its proposed fee by at least five percent of the construction cost for the in-house design.

In that situation we reached a contrary result and held the procedure to be in conflict with the Code of Ethics because the engineering firm "may be tempted to specify an inferior design concept and materials to produce a lower construction cost"(in order to secure its fee). But the discussion in Case 76-11 recognized that there was an arguable view to reach a contrary result because of the possible benefit to the public if a substantial saving of money could be realized without the sacrifice of safety or quality. In rejecting that arguable premise, however, we said that on its face §11(d) bars contingency contracts when used as a device for promoting or securing a professional commission.

If the differing results reached in the two previously decided cases can be reconciled, the rationalization would be that in Case 69-2 the engineering firm was offering a value engineering service on a contingency basis in general; whereas in Case 76-11 we were dealing with a very specific project directly related to the public health and safety. Further, as previously observed, in Case 69-2 we commented that the client was informed and would have the capability to protect its own interests by careful review, with right of rejection, of any proposed changes to achieve a saving.

The facts before us are more nearly akin to those set forth in Case 76-11, pertaining to a specific project clearly related to the public health and safety. Even more urgent, the facts before us indicate a relatively small community as the client; and we may assume, on the basis of practical experience, that such a client would not likely have the expertise of its own to judge and be in a position to recognize if the changes in the design as proposed by Doe's firm would entail dangers or a serious loss of quality for the project. True, the township fathers could call upon the original design firm for comment and recommendation before acting favorably on the changes in the design intended to effect a construction cost reduction. But in that event the township supervisors would possibly be confronted with opposing opinions of two engineering firms and not be in a position to make a qualified judgment.

The final clause of §11(d), as noted in Case 76-11, is absolute on its face in barring a contingency provision as a device for promoting work. We chose to interpret that clause liberally in Case 69-2, being influenced by the expertise of the client. But we chose to treat the clause literally in Case 76-11 because we were then, as now, of the view that the final clause of §11(d) should be taken literally in all cases when it is clear, as it is in the facts before us, that the motivation for the contingency provision is as a device to secure work. If that is too strict a rule it is for the Society to consider a revision of the code provision.

**Conclusion:\***

Doe's presentation and offer were not consistent with the Code of Ethics.

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**Board of Ethical Review**

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