

**2023 NATIONAL SOCIETY OF PROFESSIONAL ENGINEERS
MILTON F. LUNCH ETHICS CONTEST SUBMITTAL**

Submitted by:

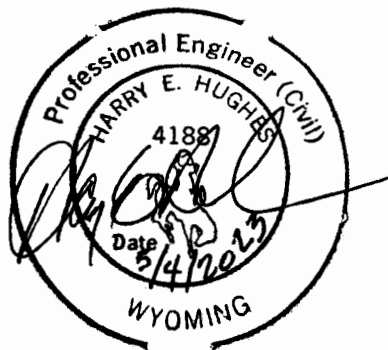


HARRY E. HUGHES, PE

PO BOX 783
THERMOPOLIS, WY 82443

CELL 307.921.8078

owlcreekengineer@rtconnect.net



Ethical Issue #1: Billing

Facts:

Engineer A, a forensic engineer, is hired by Client H to analyze the collapse of a deck. The contract specified hourly billing. Engineer A inspects the collapse, collects the appropriate data, completes the analysis, prepares a report, and bills Client H. A month later, Engineer A is hired by Client F to analyze the collapse of a second deck. Again, Engineer A inspects the collapse and collects the appropriate data. Engineer A quickly realizes that the two collapses are almost identical. Engineer A presents a lump sum contract for the same amount as the invoice to Client H. Engineer A edits the previous, Client H report, changing names, dates, measurements, etc., and finalizes the second, Client F report in less than an hour. Engineer A believes that the lump sum amount is appropriate as a billing for the value of the report, regardless of the time spent.

Question: Was Engineer A's lump sum contract with Client F ethical?

NSPE Code of Ethics References:

Preamble: "...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..."

Section I. Fundamental Canons: Engineers, in the fulfillment of their professional duties, shall:

1. Hold paramount the safety, health, and welfare of the public.
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.

Section II. Rules of Practice: Paragraph 2.a Engineers shall undertake assignments only when qualified by education or experience in the specific technical fields involved.

Section III. Professional Obligations: Paragraph 1.f. "Engineers shall treat all persons with dignity, respect, fairness, and without discrimination."

NSPE Board of Ethical Review (BER) Case References:

BER Case No. 65-6 – In the third paragraph of the discussion on this case the BER opines as follows: "...we believe that the reasonable conclusion must be that it is within the prerogative of the individual engineer to determine the fair value of his services, and charge accordingly..."

Discussion

This case poses an interesting question regarding equitable and/or ethical fees for services. First, there is nothing in the facts to suggest that Engineer A is not fully qualified to undertake the forensic investigations for Clients H and F. Further, there is nothing in the facts to insinuate that his hourly billing to Client H was, in any way, inappropriate. Consequently, Engineer A's services to Client H appear to comply with all elements of the Preamble listed above. Upon careful review of the Fundamental Canons also enumerated above (Subparagraphs 1, 4, 5, and 6) it appears that his services to Client H also comply with each and every creed contained therein. Specific compliance is noted with regard to equity, since there is nothing in the record to indicate any dissatisfaction with his hourly billing to Client H; in other words, the facts clearly indicate that Client H got what he paid for.

Now comes the ethical question of billing for his services to Client F for investigation of the second deck failure. Again, the facts are clear that Engineer A conducted an appropriate forensic review of the second deck failure; including field inspection, data gathering, forensic and technical analyses, and report preparation. Because of the similarity of the two decks and the two deck failures (the facts say "almost identical"), he was able to reuse much of the information he had developed for Client H's report, although he had to change names, dates, measurements and technical analyses using the new data from the second deck failure. His decision to negotiate a lump sum fee for services for Client F, using the same total billing amount of his hourly charges for Client H, leads to the ethical question at hand in this case; Was Engineer A's lump sum contract with Client F ethical?

Referring to the Code of Ethics, Section II, Paragraph 2.a enumerated above, Engineer A is compelled to use all of his specific technical education and experience for any and all assignments undertaken by him. Therefore, he is required to use the technical experience gained on his forensic evaluation of the first deck failure for Client H, since that experience is directly applicable to the forensic analyses of the second deck failure for Client F. Moreover, in reference to the Preamble he is compelled to use equity, among other tenets, in providing professional services; "...the services provided by engineers require ... equity...". I believe billing the same amount to Client F as billed for Client H complies with this doctrine for equity in providing professional services.

Similar to Section II of the Code of Ethics cited above, Section III, Paragraph 1.f. stipulates "Engineers shall treat all persons with dignity, respect, fairness, and without discrimination." In my opinion, "fairness and without discrimination" are applicable to Engineer A's decision to bill Client F on a lump sum basis equaling the total time and materials billing for Client H. The record is clear that his billing on a time and material basis to Client H was both appropriate and fair. The doctrines of fairness and without discrimination are both directly applicable to his decision to bill Client F the lump sum amount. That amount clearly represents the value of the professional services provided by Engineer A (as documented by his time and materials billing to Client H) hence there is no discrimination; and it is clearly fair, since he billed that exact amount previously for essentially the same professional engineering services.

In fact, it could be argued that for him to bill less to Client F, because of the experience gained on Client H's project, is unfair to Client H because, in that case, all of the benefit of his experience gained on the first forensic assignment would flow to the second assignment, which could certainly be viewed as an unfair benefit flowing to the second assignment at the expense of the first client. If he were to discount his fee for Client F, Client H might have a problem with that (if he were to find out) because he may think that some of the fee benefit of doing two similar projects should accrue to him and not solely to the new Client's project.

Lastly, I refer to:

- **BER Case No. 65-6** – In the third paragraph of the discussion on this case the BER opines as follows: "...we believe that the reasonable conclusion must be that it is within the prerogative of the individual engineer to determine the fair value of his services, and charge accordingly..."

While this analysis was applied to a different set of circumstances, the discussion is really clear to me that the BER had a strong opinion in that case that determining the fair value for professional services provided by an individual engineer is within the prerogative of that individual engineer. In this case, Engineer A determined that billing a lump sum amount for his services to Client F was a fair value for his services and, as opined by the BER, it is within his prerogative to make that determination.

Conclusion

It is ethical for an engineer to charge a lump sum fee for repetitive work equaling the value of his essentially similar services accrued on his initial assignment, which were accounted for on a time and materials basis.