

Licensure – Engineer Intern As Project Lead

Case No. 15-6

Facts:

Engineer A, employed by Firm X, is a licensed professional engineer with a B.S. and an M.S. in civil engineering. Engineer A has recently been assigned to a project for which the project lead, Engineer B, is an Engineer Intern. Engineer B has an M.S. in civil engineering, but Engineer B's undergraduate degree is not in engineering and so Engineer B must wait a few more years before taking the PPE Examination in order to gain engineering licensure. Engineer A is concerned that his work as a professional engineer is being scrutinized by a person who has not yet attained engineering licensure.

Question:

Would it be ethical for Engineer A, a licensed professional engineer, to work on an assignment for which the project lead is an Engineer Intern?

NSPE Code of Ethics References:

- Section II.1. – Engineers shall hold paramount the safety, health, and welfare of the public.*
- Section II.1.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.*
- Section II.1.e. – Engineers shall not aid or abet the unlawful practice of engineering by a person or firm.*
- Section II.2.a. – Engineers shall undertake assignments only when qualified by education or experience in the specific technical fields involved.*
- Section II.2.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.*
- Section II.2.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.*

BER Case References: 92-1; 76-1

Discussion:

Engineering licensure laws are in place to safeguard the public health, safety, and welfare. The engineering license is the means by which an individual is determined to demonstrate the technical and professional competence to practice engineering consistent with the public interest. Licensed professional engineers have an ethical obligation to practice engineering consistent with the law and regulations and to prevent unqualified individuals from practicing professional engineering.

The NSPE Board of Ethical Review has examined this critical link between engineering licensure and the public in other situations involving an Engineer Intern. As an example, in BER Case No. 92-1, Engineer A was an Engineer Intern who was employed by a medium-sized consulting engineering firm in a small city. Engineer A had a degree in mechanical engineering and had performed services almost exclusively in the field of mechanical engineering. Engineer A learned that the firm had begun a marketing campaign and in its literature listed Engineer A as an electrical engineer. There were other electrical engineers in the firm. Engineer A alerted the marketing director, also an engineer, to the error in the promotional literature and the marketing director indicated that the error would be corrected. However, after six months, the error had not been corrected. In ruling that the firm should take actions to correct the error, the Board noted that the firm's marketing director had been informed by the engineer in question that the firm's marketing brochure contained inaccurate information that could mislead and deceive a client or potential client. The Board concluded that the marketing director had an ethical obligation to take expeditious action to correct the error. The Board noted that the marketing director, a professional engineer, had an ethical obligation to both the clients and potential clients, as well as to Engineer A, to expeditiously correct the misimpression that may have been created.

BER Case 76-1 contained two relevant case examples. In Example 1, John Jones, P.E., was in charge of the design of a structure on behalf of his employer, a governmental agency. He assigned the actual design work to Samuel Smith, P.E., who was classified as a junior engineer. After Jones received the design from Smith, he assigned David Doe, a junior engineer but not a registered one, to check the work of Smith. In Example 2, Walter Williams, P.E., was the supervisor of George Green, P.E., and Green was the supervisor of Alan Adams, P.E., all of whom were employed by a governmental agency. Williams assigned to Adams the design of a structure for a particular project and told him to give his design computations to Green when the design was complete. Adams did so. However, another design performed by Green was used and no information was provided to Adams to indicate why his design was not accepted. The Board concluded that in Example 1 the action of Jones was ethical and that in Example 2 the actions of Williams and Green were ethical. Said the Board, "It is no reflection of the professional status or dignity of a registered engineer to have his work checked by a nonregistered engineer, provided that the final engineering decisions are made by a registered engineer in responsible charge. We assume that Doe was thought by Jones to be qualified for

checking the work. We also assume for the purpose of this case that the checking of the work was an interim act and that if the checking turned up any errors or questions those would be subject to further checking and final decision by Jones, the registered engineer in responsible charge.”

Looking to the facts in the present case, the Board of Ethical Review believes the facts and conclusions in BER Case 92-1, which also involved an Engineer Intern, were somewhat different than in the present case, but similar in some respects to the examples in BER Case 76-1. In Case 92-1, there was the potential for an overt public misrepresentation regarding the qualifications of Engineer A, which could result in misleading or deceiving third parties who might depend or rely on Engineer A’s qualifications as a professional engineer. In BER Case 76-1, the Board considered some of the same factors in the present case—a junior engineer reviewing the work of a professional engineer. Based on these facts, the Board is not in a position to judge the management structure of Firm X and whether there are management or other considerations, as opposed to technical or professional considerations, involved in its decision to assign project lead status to Engineer B. Having said that, it is the NSPE Board of Ethical Review’s decision that in the event Engineer A is required to sign and seal any engineering drawings, plans, specifications, reports, etc., he will need to exercise the requisite “responsible charge”—direct control/personal supervision—over the engineering design work and be satisfied that the engineering work contained therein meets applicable engineering standards before he can sign and seal the work. In addition, Engineer A must also review the state engineering licensing laws and regulations to determine these requirements and, if necessary, discuss these issues with his immediate supervisor or other managers as appropriate.

Conclusion:

It would not be unethical for Engineer A, a licensed professional engineer, to work on an assignment for which the project lead is an Engineer Intern. However, if Engineer A is required to sign and seal any engineering drawings, plans, specifications, reports, etc., he will need to exercise the requisite “responsible charge”—direct control/personal supervision—over the engineering design work and be satisfied that the engineering work contained therein meets applicable engineering standards before he can sign and seal the work. In addition, Engineer A must also review the state engineering licensing laws and regulations to determine these requirements and, if necessary, discuss these issues with his immediate supervisor or other managers as appropriate.

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