**Problem 1.8**

Stefanie is a design engineer with an international railroad locomotive manufacturing company in the state of Illinois. Management wants to return some of the engineering design work to the United States rather than export all of it to India, where their primary design work have been accom­plished for the last decade. This transfer will em­ploy more people locally and could improve the economic conditions for families in and around Illinois.

Stefanie and her design team were selected as a test case to determine the quality and speed of the de­sign work they could demonstrate on a more fuel-efficient diesel locomotive. None of her team members or she has done such a significant design job themselves, because their jobs had previously entailed only the interface with the subcontracted engineers in India. One of her team members had a great design idea on a key element that will improve fuel efficiency by ap­proximately 15%. She told Stefanie it came from one of the Indian-generated documents, but that it would probably be okay for the team to use it and remain silent as to its origin, since it was quite clear the U.S. management was about to cancel the foreign contract. Though reluctant at first, Stefanie did go forward with a design that included the efficiency improvement, and no mention of the origin of the idea was made at the time of the oral presentation or documentation delivery. As a result, the Indian contract was can­celled and full design responsibility was trans­ferred to Stefanie’s group.

Consult the NSPE Code of Ethics for Engineers (Appendix C) and identify sections that are points of concern about Stefanie’s decisions and actions.

32 **Chapter 1** Foundations of Engineering Economy

economic conditions for families in and around Illinois.

Stefanie and her design team were selected as a test case to determine the quality and speed of the de­sign work they could demonstrate on a more fuel-efficient diesel locomotive. None of her team members or she has done such a significant design job themselves, because their jobs had previously entailed only the interface with the subcontracted engineers in India. One of her team members had a great design idea on a key element that will improve fuel efficiency by ap­proximately 15%. She told Stefanie it came from one of the Indian-generated documents, but that it would probably be okay for the team to use it and remain silent as to its origin, since it was quite clear the U.S. management was about to cancel the foreign contract. Though reluctant at first, Stefanie did go forward with a design that included the efficiency improvement, and no mention of the origin of the idea was made at the time of the oral presentation or documentation delivery. As a result, the Indian contract was can­celled and full design responsibility was trans­ferred to Stefanie’s group.

Consult the NSPE Code of Ethics for Engineers (Appendix C) and identify sections that are points of concern about Stefanie’s decisions and actions.