

The Practice of Engineering in Federal, State, and Local Government

Professional Engineers (duly licensed by a cognizant licensing board) employed in the public sector at the federal, state, and local levels, serve a critical role. They are engaged in the practice of engineering like their counterparts in the private sector, and are charged with the responsibility and obligation to protect the public. As employees of governmental agencies that serve as agents of public owners, professional engineers in the public sector leverage the engineering skills and talent directly and indirectly through contracts for engineering products and services to advance the interests of the government/owner for the benefit of the general public for which they work.

In this connection, professional engineers employed in the public sector are ethically, professionally and legally bound to:

- Protect the public health, safety and welfare;
- Represent the interests of the public;
- Establish criteria and government's/owner's requirements for projects;
- Perform in-house engineering, design, and construction services when necessary in accordance with NSPE Professional Policy 63;
- Serve as the government's/owner's representative in procuring, negotiating and managing design and construction services agreements with design consultants, contractors and other parties;
- Coordinate the design and construction services provided to the government/owner;
- Be technically competent in the application and interpretation of applicable federal, state and local code requirements;
- Exercise the "practice of engineering" on behalf of the Government/owner;
- Where applicable, exercise "responsible charge" over engineering work;
- Exercise "final technical authority" over engineering decisions made on behalf of the government/owner;
- Manage government's/owner's risks associated with the engineering services and construction work;
- Maintain professional competency to perform qualified and competent engineering services for the benefit of the government/owner and the public.

The necessary corollary is that individuals who are not duly licensed as Professional Engineers should not be allowed to offer such services to the public, because they have not met the legally required level of professional competence.

In fulfilling these critical roles, professional engineers in the public sector are personally committed to and bound by both professional codes of ethics and state engineering licensure laws and regulations. In parallel with their obligation to serve the agency mission, professional engineers in the public sector have an obligation to hold paramount the public health, safety and welfare. As representatives of the government/owner, they must be attuned to the unique needs and requirements of their agency or institution and effectively communicate and manage the complicated process of identifying agency objectives and requirements, developing requests for qualifications and request for proposals, translating requirements into technical statements of work, evaluating submitted qualifications and proposals, selecting qualified parties to perform the services and the work on behalf of the government, negotiating agreements that are mutually acceptable to all parties and managing the design and construction process to completion. Such services require engineering education, training and experience

in the application of special knowledge and use of the mathematical, physical and engineering sciences and an ongoing knowledge and understanding of applicable federal, state and local requirements, laws and regulations in order to assure that all parties are meeting their contractual and other legal obligations.

In addition, engineers in the public sector serve an important role in making critical engineering judgments as the technical authority for design and construction, and they must exercise the requisite direct control and personal supervision over engineering and related services performed within the agency. Even when managing and overseeing the engineering, design and construction services procured from the private sector by the agency, public sector engineers are still engaged in the “practice of engineering” and provide their agency with confidence that the engineering and related services meet existing professional engineering standards that are intended to safeguard the public health, welfare and safety. An important aspect of this function includes the exercise of final technical authority by public sector engineers over engineering decisions affecting projects for which the agency is responsible. As governmental agencies that serve as agents of public owners, professional engineers in the public sector play a critical role in managing the overall design and construction risks associated with the performance of services procured by the agency.

For these reasons it is critical for engineers in the public sector to maintain a deep and broad understanding of the many technical and professional practice issues that they inevitably will encounter in their role as employees of public owners. Among the many ways in which this understanding is achieved is through appropriate education, training, experience, licensure, professional engineering practice (including the in-house practice of engineering, which includes the coordination of private sector engineering services) and continuing professional development.