

TEXAS BOARD of PROFESSIONAL ENGINEERS Engineering For A Better Texas

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March 20, 2012

OPINION COMMITTEE

The Honorable Greg Abbott Attorney General of Texas Office of the Attorney General P.O.12548 Austin, Texas 78711-2548

IN OPEN RECORDS

Re: Licensing of Federally Appointed Designated Engineering Representatives under the Texas **Engineering Practice Act**

Dear General Abbott:

At the request of the members of the Texas Board of Professional Engineers (Board) I respectfully request a written opinion from your office as to whether persons who are approved and appointed as Designated Engineering Representatives (DERs) by the Federal Aviation Administration (FAA) and who are performing a federal function as a DER within the State of Texas are exempt from being licensed by the Texas Board of Professional Engineers under the Texas Engineering Practice Act (Act), Texas Occupations Code, Title 6, Subtitle A, Chapter 1001.

BACKGROUND

A. Statutory Provisions.

The Act, §1001.003 (b) and (c) defines the practice of engineering as follows:

- (b) In this chapter, "practice of engineering" means the performance of or an offer or attempt to perform any public or private service or creative work, the adequate performance of which requires engineering education, training, and experience in applying special knowledge or judgment of the mathematical, physical, or engineering sciences to that service or creative work.
- (c) The practice of engineering includes:
 - (1) consultation, investigation, evaluation, analysis, planning, engineering for program management, providing an expert engineering opinion or testimony, engineering for testing or evaluating materials for construction or other engineering use, and mapping;
 - (2) design, conceptual design, or conceptual design coordination of engineering works or systems;
 - (3) development or optimization of plans and specifications for engineering works or systems:
 - (4) planning the use or alteration of land or water or the design or analysis of works or systems for the use or alteration of land or water;
 - (5) responsible charge of engineering teaching or the teaching of engineering;
 - (6) performing an engineering survey or study;
 - (7) engineering for construction, alteration, or repair of real property;
 - (8) engineering for preparation of an operating or maintenance manual;
 - (9) engineering for review of the construction or installation of engineered works to monitor compliance with drawings or specifications;
 - (10) a service, design, analysis, or other work performed for a public or private entity in connection with a utility, structure, building, machine, equipment, process, system, work, project, or industrial or consumer product or equipment of a mechanical, electrical, electronic, chemical, hydraulic, pneumatic, geotechnical, or thermal nature; or

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> (11) providing an engineering opinion or analysis related to a certificate of merit under Chapter 150, Civil Practice and Remedies Code; or

(12) any other professional service necessary for the planning, progress, or completion of an engineering service.

The Act §1001.004 (c) (2) (A) provides:

- (c) The legislature intends that:
 - (2) only a person licensed under this chapter may: (A) engage in the practice of engineering;

The Act, however, also contains several exemptions from the licensing requirements, two of which are as follows:

§ 1001.054. Federal Officer or Employee

An officer or employee of the United States is exempt from the licensing requirements of this chapter during the time the officer or employee is engaged in the practice of engineering for the United States in this state.

And,

- § 1001.057. Employee of Private Corporation or Business Entity
- (a) This chapter shall not be construed to apply to the activities of a private corporation or other business entity, or the activities of the full-time employees or other personnel under the direct supervision and control of the business entity, on or in connection with:
 - (1) reasonable modifications to existing buildings, facilities, or other fixtures to real property not accessible to the general public and which are owned, leased, or otherwise occupied by the entity;

or

(2) activities related only to the research, development, design, fabrication, production, assembly, integration, or service of products manufactured by the entity.

What complicates the issue and causes this request is a prior AG Opinion, JC- 0390, which addressed the ability of this Board to require licensing of certain persons and includes citation of a U.S. Supreme Court decision that addresses state regulation and possible interference with a federal purpose or function:

"[a] State may not enforce licensing requirements which, though valid in the absence of federal regulation, give 'the state a virtual power of review over the federal determination' that a person or agency is qualified and entitled to perform certain functions." *Sperry vs. Florida*, 373 U.S. 379, at 385 (1963) (citing *Leslie Miller, Inc. vs. Arkansas*, 352 U.S. 187 at 190 (1956)).

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B. The DER Program and the Federal Aviation Agency.

The FAA is charged with the regulation of civilian aircraft. All aspects of aircraft design; manufacturing, maintenance, traffic control, pilot training, mechanic training and the operation of aviation related businesses are regulated by the agency. The agency employs engineers directly and uses non-agency engineers, DERs, for limited consultation, data analysis and reports and approvals regarding aircraft design and certification. We believe there is no question that DERs are assisting the FAA in the performance of the federal function of ensuring the airworthiness of aircraft and thus the public health, safety and welfare.

DERs are appointed by the FAA through one of the 10 Aircraft Certification Offices (ACO) to prepare reports, monitor data and ensure compliance of aircraft design related issues to federal regulations. In the FAA DER directory, there are 130 engineers listed with Texas addresses and 19 of them appear to have an active Texas PE license. DERs are not paid by the Federal government; and do not enjoy any federal immunities or other right or privileges.

According to information received from the Ft. worth, Texas ACO, a person interested in becoming a DER (company or consultant) for the FAA must apply through one of the ACOs. The basic requirements are:

- 1) An accredited engineering degree in the appropriate field plus 4 years directly related experience or eight years' experience in the appropriate field.
- 2) Three references confirming the work experience.
- 3) Mandatory orientation and demonstrated knowledge of FAA regulations.

Depending on the desired area of practice, there may be additional experience and education requirements. Appointed DERs are strictly limited in their area of practice by the ACO, and the FAA holds the final responsibility for the issuance of certifications, orders and directives. It should be noted that the FAA can appoint a person as a DER based upon demonstrated and education experience in a specific field. This raises a related question that if what DERs do is in fact the practice of engineering (and the Board believes it is) then the federally approved and appointed non-Professional Engineer DERs would have to stop providing services to the FAA if they could not become licensed as professional engineers with this Board by completing the formal educational and testing requirements found elsewhere in the Act.

There are two types of DERs, consultant and company. A company DER works directly for a manufacturer or airline and performs all of their work for their employer and is exempt from licensing under the manufacturers exemption in §1001.057. A consultant DER works for multiple clients and is not a direct employee of a manufacturer or airline. However, the fact that a consulting DER may work directly with a client raises the issue of whether the consulting DER is under the direct control and supervision of the entity, in which case the exemption in §1001.057 would be applicable. The question we are asking relates to consultant DERs.

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C. Summary

The Board is committed to the protection of the public health, safety, and welfare in relation to the actions of both licensed and unlicensed persons in all aspects of the practice of engineering. Based solely on the statutory provisions, the Board believes that DERs are practicing engineering as defined in the Act. All persons practicing engineering in Texas must be licensed by the Board unless a statutory exception directly applies.

Our review of Title 5 United States Code reveals that DERs do not qualify for the exemption in §1001.054 because they are not appointed in the civil service of the United States (a statutory requirement to be a federal Officer or employee). In addition, consulting DERs do not qualify explicitly for the exemption in §1001.057 because they are not full time employees of a manufacturing entity. However, the decisions in *Miller vs. Arkansas* and *Sperry vs. Florida* seem to indicate that state licensure cannot be required in situations that might interfere with or otherwise frustrate a federal function where state licensing requirements exist.

To aid in your consideration of this request, we have enclosed the complete Designated Engineering Representative Handbook dated August 10, 2006. We believe Chapters 2 and 3 are particularly pertinent.

Respectfully,

Lance Kinney, P.E. Executive Director

Enclosure as stated above.

DH:dg