November 21, 2014

RE: EAOR 38 Policy Advisory Request Regarding Direct Supervision of Engineering Performed in Overseas Offices/Remote Locations

Dear Anonymous:

The Texas Board of Professional Engineers met in public session on November 20, 2014 and approved this response to an anonymous policy advisory opinion request, received September 27, 2014.

Questions: The request is made in the context of the inference that the bulk of the engineering work is being shared with overseas office(s) and posed the following questions in that regard;

- 1. Can an engineering company share any engineering work with overseas office(s), that are 12 to 16 hour difference in work hour times, by the use of communications devices when the Engineer of Record (EoR) in responsible charge is in Texas and not physically present and/or available when the work is actually being done overseas?
- 2. What kind of "communication devices" are acceptable for engineering work sharing with an overseas office(s)?
- 3. Is there any part of the engineering work (i.e.; engineering reports, specifications, details, calculations or estimates, develop engineering plans or drawings/3D computer design models, etc.) that is acceptable to work-share overseas when the EoR is in Texas and not available or in the overseas work-share office?
- 4. Can the EoR do a review and seal the final engineering documents after they have been completed by an overseas work-share office when the work wasn't present or directly supervised by the EoR?
- 5. Please define "reasonable geographic vicinity to the location of the work" in regards to where the EoR can be when work is shared overseas or out of the State?

Analysis: Direct supervision is defined in the Board Rule §131.81(10). This rule is intended to be broad enough to allow flexibility in a variety of today's work environments while ensuring that the responsible licensed professional engineer (P.E.) has sufficient input into and oversight of the work performed by others to assume responsibility and ownership for that work. The participation of the P.E. must be such that he/she makes the final engineering decisions and verifies all calculations and any design work not actually completed personally by the P.E. prior to applying his or her seal and signature so that the P.E. can then legitimately say that the work is his or hers. The rule states:

§131.81 Definitions

In applying the Texas Engineering Practice Act and the board rules, the following definitions shall prevail unless the word or phrase is defined in the text for a particular usage. Singular and masculine terms shall be construed to include plural and feminine terms and vice versa.

(10) Direct supervision - The control over and detailed professional knowledge of the work prepared under the engineer's supervision. The degree of control should be such that the engineer personally makes engineering decisions or personally reviews and approves proposed decisions prior to their implementation. The engineer must have control over the decisions either through physical presence or the use of communications devices.

Response: The following answers the anonymous requestor's questions:

1. The Board does not limit or control where or how a registered firm completes their Texas engineering projects, only that a Texas licensed P.E. performs or supervises that work and seals and signs that work. For work supervised from or for a remote location the P.E. must meet Board Rule §137.33(a), "the purpose of the engineer's seal is to assure the user of the engineering product that the work has been performed or directly supervised by the professional engineer named and to delineate the scope of the engineer's work." Therefore, an engineering company <u>can</u> share any engineering work with overseas/remote offices as long as the responsible Texas licensed P.E. has sufficient oversight no matter his or her location.

- 2. The Board Statute and Rules are silent on the kind or type of communication devices that are acceptable. At a minimum, the P.E. exercising direct supervision must be able to review and supervise the work as set out in the Board Rule. As technology advances there will be increasing device types that meet the needs and requirements of the responsible P.E. reviewing and supervising that work.
- 3. Since it is the responsibility of the P.E. exercising direct supervision to determine what is required to complete the engineering project competently with a prime consideration for protecting the health, safety and welfare of the public of Texas, then all engineering tasks <u>could</u> be done remotely.
- 4. While a licensed Texas P.E. can, and often does, assume responsibility for an engineering project or design by thoroughly analyzing the design, performing the necessary calculations, verifying that the final design meets the original requirements and then sealing and signing the engineering work to show ownership; it is important to focus the attention on requirements of the direct supervision rule, 131.81(10) for this discussion. The Board expects periodic review by either physical presence or through the use of communication devices.
- 5. The phrase "reasonable geographic vicinity to the location of the work" is from a previous version of the rule and no longer used in the definition of direct supervision in Board Rule §131.81(10) (see above). The current rule requires that the responsible P.E. "... must have control over the [engineering] decisions either through physical presence or the use of communications devices."

Sincerely,

Lance Kinney, P.E. Executive Director

LK:CWC:dpt