STATE OF WISCONSIN EXAMINING BOARD OF ARCHITECTS, LANDSCAPE ARCHITECTS, PROFESSIONAL ENGINEERS, DESIGNERS, AND PROFESSIONAL LAND SURVEYORS

IN THE MATTER OF RULEMAKING : ORDER OF THE PROCEEDINGS BEFORE THE : EXAMINING BOARD OF EXAMINING BOARD OF ARCHITECTS, : ARCHITECTS, LANDSCAPE LANDSCAPE ARCHITECTS, : ARCHITECTS, PROFESSIONAL PROFESSIONAL ENGINEERS, : ENGINEERS, DESIGNERS, AND DESIGNERS, AND PROFESSIONAL : PROFESSIONAL LAND SURVEYORS

LAND SURVEYORS ADOPTING RULES

(CLEARINGHOUSE RULE 19-075)

ORDER

An order of the Examining Board of Architects, Landscape Architects, Professional Engineers, Designers, and Professional Land Surveyors to repeal s. A-E 4.04, s. A-E 4.06, s. A-E 4.07 (1), s. A-E 4.07 (4), s. A-E 4.07 (7), and s. A-E 4.08 (1); to renumber s. A-E 4.03 (1), s. A-E 4.05 (1) (d), s. A-E 4.05 (3); to renumber and amend s. A-E 4.02, s. A-E 4.03 (intro.), s. A-E 4.05 (title), s. A-E 4.05 (1) (intro.), (a), (b), (c), and s. A-E 4.05 (2); to amend s. A-E 4.02 (title), s. A-E 4.03 (title), s. A-E 4.07 (6), s. A-E 4.08 (title), s. A-E 4.08 (2) (intro.), and s. A-E 4.08 (2) (a); and to create s. A-E 4.015, s. A-E 4.02 (2), s. A-E 4.025, s. A-E 4.026 (1) (e), s. A-E 4.026 (1) (f), s. A-E 4.026 (2) (d), s. A-E 4.026 (2) (e), s. A-E 4.026 (2m), s. A-E 4.03 (1) (b), s. A-E 4.03 (1) (d), s. A-E 4.07 (1m), s. A-E 4.08 (3), and s. A-E 4.08 (4), relating to professional engineer registration.

Analysis prepared by the Department of Safety and Professional Services.

ANALYSIS

Statutes interpreted: ss. 443.04, 443.05, 443.09 (4), and 443.10, Stats.

Statutory authority: ss. 15.08 (5) (b) and 227.11 (2) (a), Stats.

Explanation of agency authority:

Section 15.08 (5) (b), Stats., provides an examining board, "shall promulgate rules for its own guidance and for the guidance of the trade or profession to which it pertains..."

Section 227.11 (2) (a), Stats., sets forth the parameters of an agency's rule-making authority, stating an agency, "may promulgate rules interpreting provisions of any statute enforced or administered by the agency. . ."

Related statute or rule:

s. A-E 13

Plain language analysis:

The Professional Engineer Section has reviewed the chapter and made revisions to:

- Ensure applicants may use the National Council of Examiners for Engineering and Surveying (NCEES) uniform reporting standards as evidence for application requirements;
- Clarify that candidates who pass the NCEES Structural Engineering examination are not required to take the Principles and Practice of Engineering exam (PE Exam);
- Remove the requirement that applicants for initial licensure have a reference who is registered in Wisconsin; and
- Reorganize the chapter for clarity, consistency, and to meet drafting standards.

Section 1 creates definitions for the chapter for "ABET" and "NCEES."

Sections 2, 3, and 4 amend s. A-E 4.02. Sections 2 and 3 clarify that a new application and fee may be required, to be more consistent with current department policies. Section 4 also creates a new subsection to cross-reference other chapters relating to professional engineers and continuing education.

Section 5 creates s. A-E 4.025 to separately treat information about how to apply for an engineer-in-training certificate. Previously, this information was included in statutes and s. A-E 4.06. By consolidating the requirements into one section, the chapter will be easier for applicants to use. Additionally, the new s. A-E 4.025 clarifies that applicants may use a record properly executed and issued with verification by NCEES as evidence of qualifications.

Sections 6 and 12 move the listing of application requirements to the beginning of the chapter into s. A-E 4.026 to consolidate application requirements making the chapter easier to use. The created subsections (1) (e), (1) (f), (2) (d), and (2) (e) are moved from s. A-E 4.08. Section 12 renumbers s. A-E 4.05 and amends it to conform to drafting standards.

Sections 7, 8, 9, 10, and 13 consolidate the experience requirements into s. A-E 4.03 by including s. A-E 4.04 and s. A-E 4.05 (3). Section A-E 4.03 is also amended to clarify that qualifying experience must be gained under the supervision of a registered professional engineer, consistent with NCEES model administrative rules. Section 13 renumbers s. A-E 4.05 (3) into s. A-E 4.03, to further consolidate provisions relating to experience requirements.

Section 11 repeals s. A-E 4.04, because the content was moved into s. A-E 4.03 (1) (d).

Section 14 repeals s. A-E 4.06, because it was moved into the newly created s. A-E 4.025 (1) (a).

Sections 15, 17, and 19 repeal s. A-E 4.07 (1), (4), and (7), respectively, because the examinations are provided by NCEES.

Section 16 creates a new subsection to specify which examinations are required for licensure. The new subsection also clarifies that if an applicant takes the NCEES Structural Engineering examination, then the applicant is not required to take an NCEES Principles and Practice of Engineering examination.

Section 18 clarifies that the Professional Engineer Section sets the passing scores for minimum competency.

Sections 20, 21, 22, and 23 amend s. A-E 4.08 to repeal information moved to other sections of the chapter, and focus on applications for reciprocity. Additionally, the section clarifies that applicants may use a record properly executed and issued with verification by NCEES as evidence of qualifications, and adds cross-references to relevant statutory provisions.

Summary of, and comparison with, existing or proposed federal regulation: None.

Comparison with rules in adjacent states:

Illinois:

Illinois licenses Professional Engineers and Structural Engineers separately. Applicants for the Structural Engineer license must pass the NCEES Structural Engineer exam in order to qualify. The State Board of Professional Engineers and the Structural Engineering Board do accept NCEES records as evidence for examinations, education, and license verifications for applicants by endorsement. They do not accept an NCEES record for verification of employment or experience. An applicant must submit evidence of experience supervised by licensed Professional Engineers or Structural Engineers, as appropriate, but the supervisor is not required to be licensed in Illinois. The specific requirements of licensure are in sections 1380.210 through 1380.325, IL Admin. Code.

Iowa:

Iowa licenses Professional Engineers, with the license being granted for the specific branch of engineering, including Structural Engineering, related to the education, experience, and the NCEES Principles and Practice of Engineering examination the applicant passed. The Engineering and Land Surveying Examining Board requires applicants file a standardized, notarized application online with transcripts sent directly from the institution and references mailed in signed and sealed envelopes. An applicant must provide five references, three of whom are licensed professional engineers and at least one of whom supervised the applicant in gaining their qualifying experience. References are not required to be licensed in Iowa. The specific requirements of licensure are in sections 193C.3.1 through 193C.4.3, IA Admin. Code.

Michigan:

Effective April 4, 2017, Michigan no longer requires five references as part of the application. However, qualifying experience must still be verified by individuals. Applicants are also no longer required to apply to sit for NCEES exams through the Board of Professional Engineers.

Applicants must submit a transcript to verify educational background to the Board, and must take the NCEES Principles and Practice of Engineering exam. The specific requirements of licensure are in sections R 339.16001 through R 339.16034, MI Admin. Code.

Minnesota:

The Board of Architecture, Engineering, Land Surveying, Landscape Architecture, Geoscience, and Interior Design accepts NCEES records as evidence of qualifying examination scores, education, experience, and license verifications for applicants by comity.

Applicants are required to take the NCEES Principles and Practice of Engineering exam. While references are not required, qualifying experience must be verified by each of the applicant's supervisors and submitted with the application. Supervisors are not required to be licensed in the state of Minnesota. The specific requirements of licensure are in sections 1800.2500 through 1800.2900, MN Admin. Rules.

Summary of factual data and analytical methodologies:

The Professional Engineer Section of the Examining Board of Architects, Landscape Architects, Professional Engineers, Designers, and Professional Land Surveyors closely reviewed A-E 4 and the National Council of Examiners for Engineering and Surveying (NCEES) model administrative rules to develop the rule revisions.

Analysis and supporting documents used to determine effect on small business or in preparation of economic impact analysis:

The rules were posted for a period of 14 days to solicit public comment on economic impact, including how the rules may affect businesses, local government units, and individuals. No comments were received.

Fiscal Estimate and Economic Impact Analysis:

The Fiscal Estimate and Economic Impact Analysis is attached.

Effect on small business:

These rules do not have an economic impact on small businesses, as defined in s. 227.114 (1), Stats. The Department's Regulatory Review Coordinator may be contacted by email at Daniel.Hereth@wisconsin.gov or by calling (608) 267-2435.

Agency contact person:

Dale Kleven, Administrative Rules Coordinators, Department of Safety and Professional Services, Division of Policy Development, 4822 Madison Yards Way, P.O. Box 8366, Madison, Wisconsin 53705-8366; telephone 608-261-4472; email at DSPSAdminRules@wisconsin.gov.

Place where comments are to be submitted and deadline for submission:

Comments may be submitted to Helen Leong, Administrative Rules Coordinator, Department of Safety and Professional Services, Division of Policy Development, 4822 Madison Yards Way, P.O. Box 8366, Madison, Wisconsin 53705-8366; telephone 608-266-0797, or by email to DSPSAdminRules@wisconsin.gov. Comments must be received on or before 1:00 pm on October 8, 2019 to be included in the record of rule-making proceedings.

TEXT OF RULE

SECTION 1. A-E 4.015 is created to read:

A-E 4.015 Definitions. In this chapter:

- (1) "ABET" means the Accreditation Board for Engineering and Technology.
- (2) "NCEES" means the National Council of Examiners for Engineering and Surveying.

SECTION 2. A-E 4.02 (title) is amended to read:

A-E 4.02 (title) Application for registration Applications.

SECTION 3. A-E 4.02 (2) is created to read:

A-E 4.02 (2) A renewal applicant shall comply with s. A-E 2.05 and ch. A-E 13.

SECTION 4. A-E 4.025 is created to read:

- **A-E 4.025 Application for certification as an engineer-in-training.** (1) An applicant for engineer-in-training is required to submit all of the following:
- (a) Evidence of a passing score of a fundamentals examination, in accordance with s. A-E 4.07 (1m) (a).
- **(b)** Transcripts verifying the applicant's education and training, or a specific record of experience satisfactory to the professional engineer section to meet the requirements of s. 443.05, Stats.
- (2) Submission of a record that is properly executed and issued with verification by NCEES may be accepted as evidence of the information that is required by the professional engineer section.

SECTION 5. A-E 4.026 (1) (e), (1) (f), (2) (d), (2) (e), and (2m) are created to read:

- **A-E 4.026** (1) (e) References from at least 5 individuals having personal knowledge of the applicant's engineering work, 3 or more of whom are registered professional engineers, one of whom has served as supervisor in responsible charge of the applicant's engineering work.
- (f) A chronological history of the applicant's employment.
- (2) (d) References from at least 5 individuals having personal knowledge of the applicant's engineering work, 3 or more of whom are registered professional engineers, one of whom has served as supervisor in responsible charge of the applicant's engineering work.
- (e) A chronological history of the applicant's employment.
- (2m) NCEES RECORD. Submission of a record that is properly executed and issued with verification by NCEES may be accepted as evidence of the information that is required by the professional engineer section.

SECTION 6. A-E 4.03 (title) is amended to read:

A-E 4.03 (title) Engineering experience <u>requirements</u> for the professional engineer application.

SECTION 7. A-E 4.03 (intro.) is renumbered A-E 4.03 (1g) (a) and amended to read:

A-E 4.03 (1g) (a) QUALIFYING EXPERIENCE. To qualify as satisfactory experience in engineering work for the purpose of meeting requirements of s. 443.04, Stats., an applicant's experience shall include the application of engineering principles and data and shall demonstrate an applicant's progressive development of competence to do engineering work. The experience shall be acquired in the areas of engineering practice listed in subs. (1) to (7) or in other areas of engineering practice or academic course work which in the opinion of the board provides the applicant with a knowledge of engineering principles and data at least equivalent to that which would be acquired by experience in the areas of practice listed. Experience in all areas listed is not required.

SECTION 8. A-E 4.03 (1g) (b) and (d) are created to read:

A-E 4.03 (1g) (b) The experience shall be acquired under the supervision of a registered professional engineer and in the areas of engineering practice listed in subs. (1r) to (7), or acquired in other areas of engineering practice or academic course work which in the opinion of the professional engineer section provides the applicant with a knowledge of engineering principles and data at least equivalent to that which would be acquired by experience in the areas of practice listed. Experience gained under the technical supervision of an unregistered individual may be considered if the appropriate credentials of the unregistered supervisor are submitted to the professional engineer section.

(d) Experience in all areas listed is not required. Not more than one year of satisfactory experience credit may be granted for any calendar year.

SECTION 9. A-E 4.03 (1) is renumbered A-E 4.03 (1r).

SECTION 10. A-E 4.04 is repealed.

SECTION 11. A-E 4.05 (title), (1) (intro.), (a), (b), (c), and (d) and (2) are renumbered A-E 4.026 (title), (1) (intro.), (a), (b), (d), and (c) and (2) and A-E 4.026 (title), (1) (intro.), (a) (b), (d), and (2) are amended to read:

A-E 4.026 Requirements Application for registration as a professional engineer.

- (1) FOUR YEAR COURSE OF STUDY. A four year course of study requires An applicant for professional engineer based on a four-year course of study is required to submit all of the following:
- (a) A <u>transcript verifying the applicant's</u> bachelor of science degree (B.S.) in engineering from a school or college of engineering <u>in a program</u> accredited by the <u>engineering</u> accreditation commission of the accreditation board for engineering and technology (EAC/ Engineering Accreditation Commission of ABET) in engineering of not less than 4 years, or a diploma of graduation in engineering of not less than 4 years deemed by the professional engineer section to be equivalent to a B. S. bachelor of science degree in engineering from an EAC/ABET accredited a school or college of engineering in a program accredited by the Engineering Accreditation Commission of ABET.
- (b) A specific record of 4 or more years of experience in accordance with s. A-E 4.03 within the 10 years preceding the application in engineering work of a character satisfactory to the professional engineer section indicating that the applicant is competent to be placed in responsible charge of engineering work. Experience gained in obtaining a master's degree in engineering and experience gained in obtaining a Ph.D. in engineering or in an engineering related program shall each be deemed equivalent to one year of qualifying experience.
- (d) Successful Evidence of successful completion of the \underline{a} fundamentals of engineering examination and the \underline{a} principles and practice of engineering examination, in accordance with s. A-E 4.07 (1m).
- (2) TWO YEAR COURSE OF STUDY. A 2 year course of study requires An applicant for professional engineer based on a 2-year course of study is required to submit all of the following:
- (a) An A transcript verifying the applicant's associate degree in engineering related course of study from a technical school or college in an engineering course of study of not less than 2 years that is accredited by the engineering technology accreditation commission of the accreditation board for engineering and technology (ETAC/Engineering Technology Accreditation Commission of ABET) in an engineering related course of study of not less than 2 years. This shall be deemed equivalent to a degree from a technical school or college approved by the professional engineer section.

- **(b)** A specific record of 6 or more years of experience <u>in accordance with s. A-E 4.03</u> within the 10 years preceding the application in engineering work of a character satisfactory to the professional engineer section indicating that the applicant is competent to be placed in responsible charge of engineering work.
- (c) Successful Evidence of successful completion of the \underline{a} fundamentals of engineering examination and the \underline{a} principles and practice of engineering examination, in accordance with s. A-E 4.07 (1m).

SECTION 12. A-E 4.05 (3) is renumbered A-E 4.03 (1g) (c).

SECTION 13. A-E 4.06 is repealed.

SECTION 14. A-E 4.07 (1) is repealed.

SECTION 15. A-E 4.07 (1m) is created to read:

A-E 4.07 (1m) REQUIRED EXAMINATIONS.

- (a) The required fundamentals examination is an NCEES Fundamentals of Engineering examination.
- (b) The required principles and practice of engineering examination is an NCEES Principles and Practice of Engineering examination, or, in the alternative, the applicant may take the NCEES Structural Engineering examination in its entirety.

SECTION 16. A-E 4.07 (4) is repealed.

SECTION 17. A-E 4.07 (6) is amended to read:

A-E 4.07 (6) GRADING OF WRITTEN EXAMINATIONS. The passing scores set by the board professional engineer section represent the minimum competency required to protect public health and safety. Experience ratings may not be weighed as a part of the examinations.

SECTION 18. A-E 4.07 (7) is repealed.

SECTION 19. A-E 4.08 (title) is amended to read:

A-E 4.08 (title) Application contents for reciprocity.

SECTION 20. A-E 4.08 (1) is repealed.

SECTION 21. A-E 4.08 (2) (intro) and (a) are amended to read:

A-E 4.08 (2) (intro) An application for registration by eomity reciprocity from another state shall include all of the following:

(a) Verification of registration submitted directly from all states, territories, or provinces of Canada where the applicant is or has been registered, including a statement regarding any disciplinary action taken.

SECTION 22. A-E 4.08 (3) and (4) are created to read:

- **A-E 4.08** (3) Submission of a record that is properly executed and issued with verification by NCEES may be accepted as evidence of the information that is required by the professional enginer section.
- (4) Reciprocity may be granted, in accordance with s. 443.10 (1) (d), Stats., to a person who holds an unexpired registration issued by an authority in any state or territory or possession of the United States or in any country in which the requirements for registration are of a standard not lower than required by the professional engineer section.

SECTION 23. EFFECTIVE DATE. The rules adopted in this order shall take effect on the first day of the month following publication in the Wisconsin Administrative Register, pursuant to s. 227.22 (2) (intro.), Stats.

(END OF TEXT OF RULE)	