ETHICS & THE PRACTICE OF ENGINEERING IN FLORIDA

Florida Board of Professional Engineers



About me: Dylan Albergo

- Christian
- Married 5 years
- BS, Florida State University
- MS, University of Florida
- Appointed to FBPE by Governor Rick Scott in 2018 and by Governor Ron DeSantis in 2021/2022
- Professional Engineer at WGI, Inc.
- Specialty in transportation structures, specifically bridges





In this presentation

- About FBPE
- Basic engineering canons
- Chapter 471, Florida Statutes, Engineering
- Chapter 61G15, Florida Administrative Code, Board of Professional Engineering
- Chapter 61G15, F.A.C., highlights
- Recent cases and examples



About FBPE & FEMC

- Florida Board of Professional Engineers
 - Created in 1917 by the Florida Legislature
 - 11 Board members: 9 are licensed PEs; 2 are laypersons; all appointed by the Governor
 - Over 43,000 active licensed engineers in Florida
- Florida Engineers Management Corporation
 - Established in 1998 by Legislature (Section 471.038, Florida Statutes)
 - Non-profit, single-purpose corporation contracted with DBPR
 - 7-member Board of Directors: 5 appointed by FBPE; 2 laypersons appointed by DBPR





Scott Drury, PE

CHAIR

Mechanical

Appointment Term:
02/21/18 - 10/31/21



Dylan Albergo, PE

VICE CHAIR

Civil

Appointment Term:
02/21/18 - 10/31/25



C. Kevin Fleming, PE

Electrical

Appointment Term:
03/27/15 - 10/31/22



Jeb Mulock, PE

Engineering

Appointment Term:

6/8/21 - 10/31/25



Yassi Myers, PE Engineering Appointment Term: 6/8/21 - 10/31/22



John Pistorino, PE

Education

Appointment Term:
6/8/21 - 10/31/23



Denise Ramsey, PE Engineering Appointment Term: 6/8/21 - 10/31/23



Pankaj (PJ) Shah, PE

Civil

Appointment Term:

05/25/17 - 10/31/24



CGC, CCC

Civil

Appointment Term:
02/20/15 - 10/31/24

Babu Varghese, PE, SI,



What is the Florida Board of Professional Engineers?

"Committed to protecting the interest of public health and safety by properly regulating the practice of engineering."

- Makes rules for the profession of engineering
- Reviews applications for licensure
- Takes disciplinary actions against engineers
- Meets 6 times a year in designated locations around Florida
- All Board meetings are open to the public



What is the Florida Engineers Management Corporation?

- Issues licenses to those certified by FBPE as qualified to practice engineering
- Provides administrative services to FBPE
- Provides investigative and prosecutorial services for disciplinary actions by FBPE
- Promotes engineering licensure by outreach to prospective engineers and information to the public



What is NCEES?

- The National Council of Examiners for Engineering and Surveying
- National, nonprofit organization dedicated to advancing professional licensure for engineers and surveyors
- Develops, administers, and scores the examinations use for engineering and surveying licensure in the United States
- Provides central recordkeeping for engineers
- Provides credentials evaluations



Why are professional ethics important?

Ethical behavior:

- Ensures the public health and safety
- Upholds the integrity, honor, and dignity of the engineering profession
- Creates credibility
- Promotes responsibility and accountability
- Discourages misconduct



What are the basic engineering canons?

- Hold paramount the safety, health, and welfare of the public
- Perform services only in the areas of competence
- Issue public statements only in an objective and truthful manner

Where are these canons found?

- All engineering societies include a restatement of these canons in their codes of conduct
- Some states (but not Florida) include them in their licensure laws



Some engineering societies have aspirational statements

The Engineer's Creed

As a Professional Engineer, I dedicate my professional knowledge and skill to the advancement and betterment of human welfare.

I pledge:

To give the utmost of performance;

To participate in none but honest enterprise;

To live and work according to the laws of man and the highest standards of professional conduct;

To place service before profit, the honor and standing of the profession before personal advantage, and the public welfare above all other considerations.

In humility and with need for Divine Guidance, I make this pledge.

- National Society of Professional Engineers



How to carry out the basic engineering canons

- Act for each employer or client as faithful agents or trustees, and avoid deceptive acts
- Conduct oneself honorably, responsibly, ethically, and lawfully as to enhance the honor, reputation, and usefulness of the profession



What laws and rules govern engineering in Florida?

- Laws: Chapter 471, Florida Statutes, Engineering
- Rules: Chapter 61G15, Florida Administrative Code, *Board of Engineers Organization and Purpose*

Links to both can be found under the *Legal* section on the FBPE website: fbpe.org.



What is Chapter 471, Florida Statutes?

- The Florida Legislature established Chapter 471 to regulate the practice of engineering in the state "in the interest of public health, life, property, and safety."
- Defines engineering
- Defines qualifications for the practice of engineering
- Demonstrates need for licensure and fees
- Establishes FBPE, which has authority for:
 - Licensing Professional Engineers in Florida
 - Taking disciplinary actions regarding the practice of engineering
- Establishes FEMC to administer FBPE



How and when is Chapter 471 revised?

- Legislators propose bills, which if passed by both houses of the Legislature and signed by the Governor, become law.
- Florida Statutes are updated annually as laws are created, amended, transferred, or repealed by the Legislature.



What is Chapter 61G15, Florida Administrative Code?

- Establishes examination, licensing, and continuing education requirements
- Sets signing and sealing requirements
- Defines "Responsible Charge" and "Engineering Design"
- Establishes grounds for disciplinary proceedings
- Establishes fines for violations
- Sets specific requirements for structural, fire safety, electrical and mechanical systems



How and when is Chapter 61G15 revised?

- Professional and technical organizations or individuals submit items for consideration.
- FBPE committees meet to consider the proposals.
- Committee decisions are presented to the Board for discussion and vote.



Who enforces the authority of Chapter 61G15?

- Under Rule 61G15-19.004, the Board sets forth a range of disciplinary guidelines from which penalties will be imposed.
- FEMC investigates and prosecutes at the direction of FBPE.
- FBPE disciplines those found in violation of the Rules.

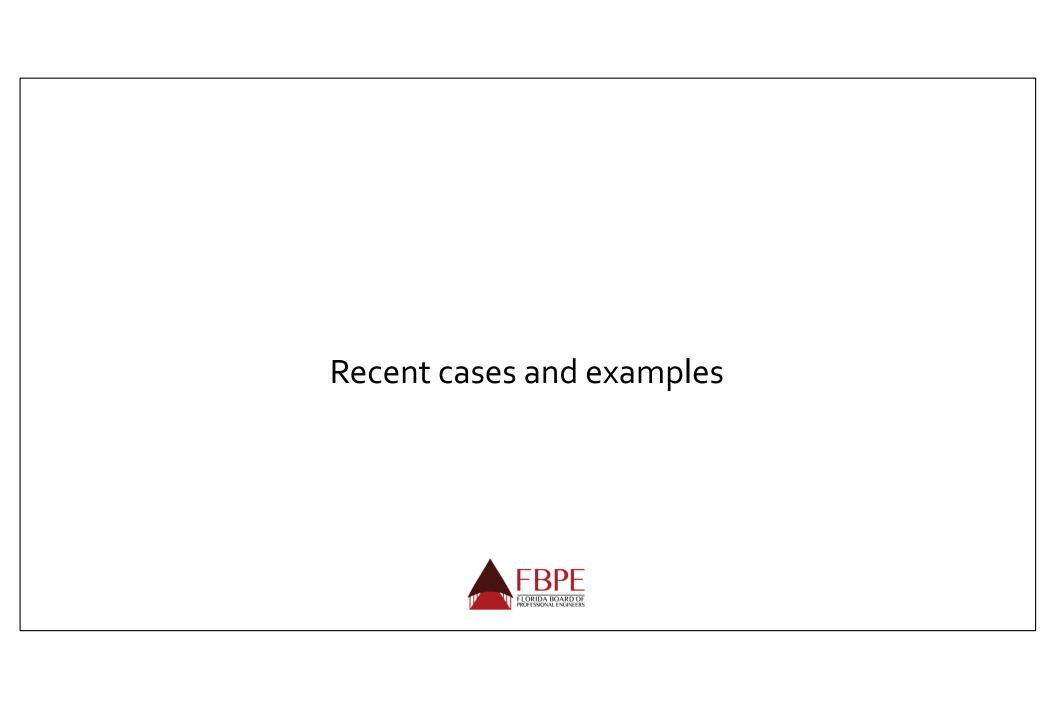


Violations defined by Rule 61G15-19

(Some engineering societies include similar admonishments in their ethical codes.)

- Practicing engineering when not qualified
- Revealing facts or data without consent of client
- Expressing an opinion publicly without having the facts
- Soliciting/accepting gratuities to influence engineering employment
- Failing to disclose a conflict of interest
- "Plan stamping"
- Failure to use due care (negligence)







Committed to protecting the interest of public health and safety by properly regulating the practice of engineering



Committed to protecting the interest of public health and safety by properly regulating the practice of engineering

HOME ABOUT LICENSURE LEGAL MEETINGS & INFO CONTINUING EDUCATION CORPORATE HOME ABOUT LICENSURE LEGAL MEETINGS & INFO CONTINUING EDUCATION CORPORATE

Licensee was charged with violating Section 471.033(1)(g), Florida Statutes, and Rule 61G1519.001(4), Florida Administrative Code; negligence in the practice of engineering, failure by a
Professional Engineer to use due care in performing in an engineering capacity, or failing to have due regard for acceptable standards of engineering principles.

signed, dated, and sealed deficient engineering documents for electrical, mechanical (HVAC), and mechanical (plumbing) designs for 1,024-square-foot dwelling in New Port Richey, Fla.

Ruling: The case was presented to the full Board upon a Settlement Stipulation. The Board imposed an administrative fine of \$1,000 and costs of \$2,500, an appearance before the Board, successful completion of the Board's Study Guide and a Board-approved intermediate course in engineering ethics and professionalism, a permanent restriction from the practice of electrical (power) and mechanical (HVAC) engineering. Final Order was Issued Aug. 20, 2021.

Violation: Section 471.033(1)(g), Florida Statutes, and Rule 61G15-19.001(4), Florida Administrative Code



Licensee was charged with violating Section 471.033(1)(g), Florida Statutes, and Rule 61G1519.001(4), Florida Administrative Code, negligence in the practice of engineering, failure by a
Professional Engineer to use due care in performing in an engineering capacity, or failing to have due regard for acceptable standards of engineering principles; and Section 471.033(1)(k), violating terms of a previous Final
Order.

Two of projects (one in Miami, another in Fort Lauderdale) were selected for a required 18-month plan review. The review found deficiencies in electrical, mechanical (HVAC), and mechanical (plumbing) engineering design documents for both projects.

Ruling: The case was presented to the full Board. Respondent failed to respond to the Administrative Complaint. The Board revoked the Respondent's Florida PE license. Final Order was issued Sept. 3, 2021.

 $\label{eq:Violation:Section 471.033(1)(g), Florida Statutes, Rule 61G15-19.001(4), Florida Administrative Code, and Section 471.033(1)(k), F.S. \\$

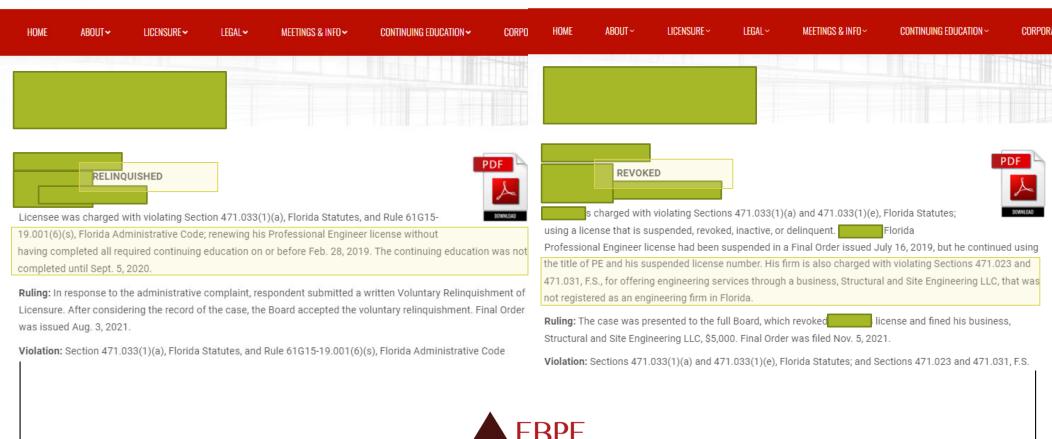




Committed to protecting the interest of public health and safety by properly regulating the practice of engineering



Committed to protecting the interest of public health and safety by properly regulating the practice of engineering



STIPULATED DISPOSITION OF LAW

- Respondent shall, in the future, comply with Chapters 471 and 455, Florida Statutes, and the rules promulgated pursuant thereto.
- Should Respondent fail to comply with the terms of the Final Order, an administrative complaint for failure to comply with final order will automatically be opened against Respondent.
- 3. Respondent shall <u>APPEAR</u> before the Board when this Stipulation is presented. Respondent must be prepared to discuss: how this situation occurred, what improvements and quality control measures Respondent plans to implement to improve Respondent's work product, and how Respondent intends to prevent this circumstance from occurring in the future.
- 4. Respondent shall pay an <u>ADMINISTRATIVE FINE</u> of \$1,000.00 and <u>COSTS</u> of \$4,425.80 to the Board within One (1) year of the date that the Final Order adopting this Stipulation is filed with the Agency Clerk. The Fine and Costs shall be paid in Quarterly Payments of \$1,356.45. Payments can made early.
- 5. a. Respondent's license shall be <u>RESTRICTED</u> from practicing any electrical engineering until such time that he completes, passes and submits proof of passing the

NCEES 8 HOUR Electrical Power examination. The terms "Electrical Engineering" encompasses all services encompassed by Rule Chapter 61G15-33, Florida Administrative Code.

- b. Subsequent to taking and passing the NCEES Electrical Examination, Respondent shall submit to the Board a detailed list of all completed Electrical Engineering projects (signed, sealed, and dated), by the Respondent for PROJECT REVIEW at six (6) and eighteen (18) month intervals from the date on which Respondent passes the examination. The projects shall include: all Electrical Engineering projects and reports signed and sealed by Respondent
- c. A FEMC Consultant will select two (2) projects from the submitted list for review. The Respondent is responsible for promptly furnishing any set of completed plans (signed, sealed, and dated), calculations, and any other supporting documentation requested by the Consultant. The Respondent must sign, date, and seal all materials that are submitted for project review using a non-embossed, rubber stamp seal. Sealed project review materials may be copied and submitted electronically, if desired, by the Respondent. Respondent is also responsible for the Consultant's fees for reviewing the projects, and shall remit payment in the amount of \$2,000.00 by check or money order made payable in the name of the Board's Consultant at the time that the project lists are submitted to FEMC. In the event that the project reviews cost exceed \$2,000.00, then the Respondent is responsible for the deficiency. In the event that the cost of the reviews is less than \$2,000.00, then the unused portion will be refunded to Respondent. Should the Consultant return an unfavorable report concerning Respondent's projects, that report shall be submitted to the Probable Cause Panel for determination of whether additional disciplinary proceedings should be initiated.







ONLINE SERVICES

Apply for a License

Verify a Licensee

View Food & Lodging Inspections

File a Complaint

Continuing Education Course Search

View Application Status

Find Exam Information

Unlicensed Activity Search

AB&T Delinquent Invoice & Activity List Search

LICENSEE DETAILS

Licensee Information

Name: Main Address:

County:

License Information

License Type:

Rank:

License Number:

Status:

Licensure Date:

Expires:

Special Qualifications

Qualification Effective

Civil

Restricted Permanent Elec/Computer

Advanced Building Code Course Credit

7th Edition, Florida Building Code



Case Study

Facts

- Respondent's (Laura) license was restricted due to previous Final Order
- Company had a looming structural engineering report deadline for a valued client
- Responsible Professional Engineer (James) experienced an unexpected tragedy
- Laura was the sole engineer assisting James throughout the life of the project
- Laura noticed that the "Restricted Structural" tag was missing from the website

Discussion

1. With a looming project deadline, what should Laura do?



Words of Wisdom (Application)

"Sometimes it seems as if there are more solutions than problems. On closer scrutiny, it turns out that many of today's problems are a result of yesterday's solutions."

-Thomas Sowell







Online at FBPE.org