



# Own the Code!

Title 24, JA8  
& Getting Involved



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## ABOUT CODES

- The purpose of a good code is to prevent bad design and to protect the safety of the public. California sees global warming as a threat – and I agree.
- Good design is the challenge of the designers, architects, engineers, contractors and owners to achieve within a the budget for the project based on its location, purpose and owning and operating economics.

HOW DOES THE CODE GET  
DEVELOPED?

## FIRST 20 YEARS 1978-1998

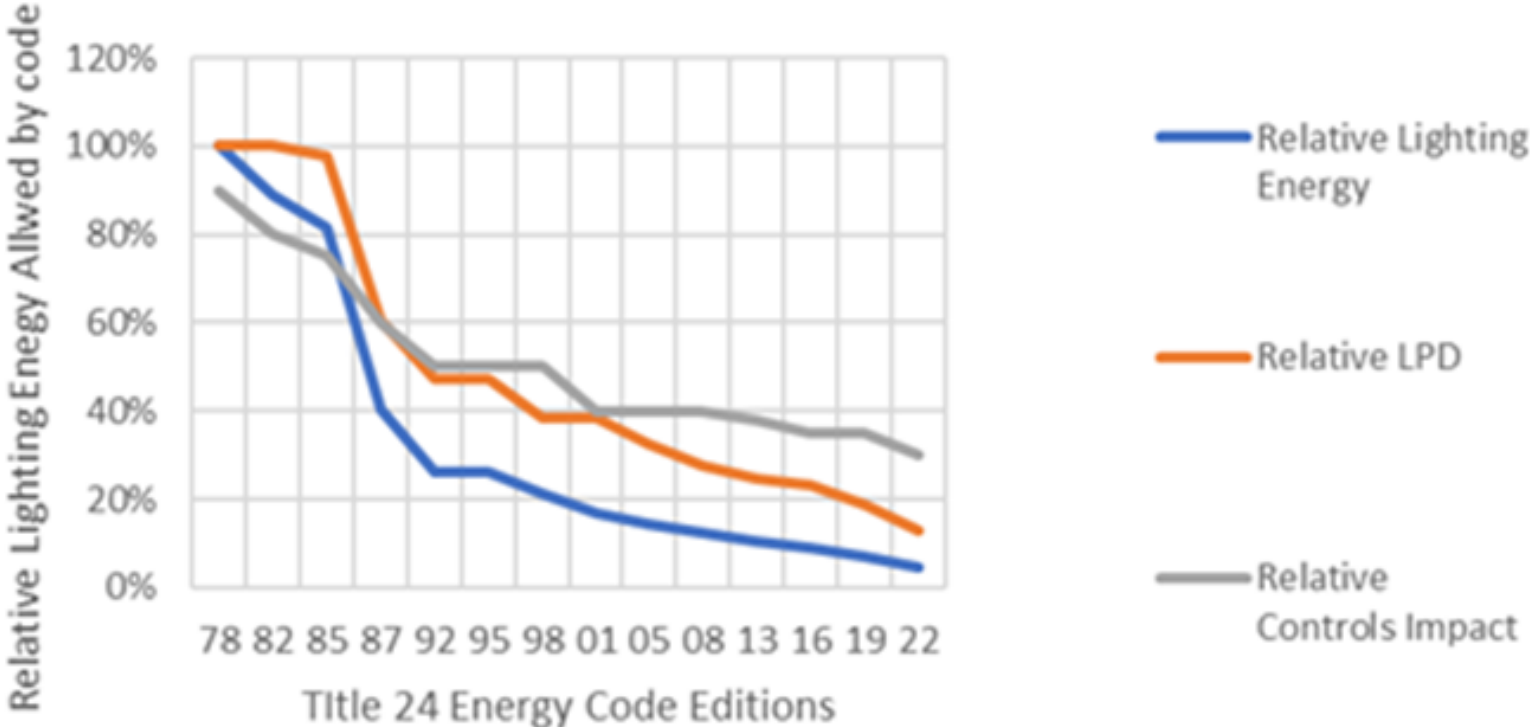
- Lighting Standards developed by the Professional Advisory Group (PAG) working with the IES South Pacific Coast Regional Energy Committee (REC)
- Additional development of strategies for future Standards by the Advanced Lighting Professional Advisory Group (ALPAC) 1985-1994 and the Advanced Lighting Advisory Group (ALAC) 1994-1996
- Ended with the retirement of Fred Berryman, FIES, in 1997
- Staff consulting support for non-residential standards development by Noresco (nee Architectural Energy Corporation nee Eley Associates)

## NEXT 20 YEARS 1999-2019

- Lighting Standards developed by CEC Staff based on CASE Reports (Codes and Standards Enhancement)
- CASE Report proposals developed by TRC (nee Heschong Mahone Group) Energy Solutions, and others
- Participation by IES, IALD, NEMA, and others primarily through the comments process and public hearings
- Staff consulting support for non-residential standards development by Noresco (nee Architectural Energy Corporation and Eley Associates)

# SUCCESS OF THE CODE

## Lighting Energy Use Relative to 1973 among code complying new buildings



# PROBLEMS OF THE CODE TODAY

- Complex
- Considerable or excessive paperwork
- Nit-picking details
- Seriously lagging technological evolution
- Difficult to enforce
- Questionable benefit from some provisions
- Forcing technology

# CRITICAL PROBLEMS OF THE CODE TODAY

- Many provisions fail to meet the three principal requirements of the Warren Alquist Act
  1. Must use readily available systems and products that are readily available from multiple suppliers
  2. Must be cost effective
  3. Must have impact
- Has increased the cost of California buildings compared to other states (design and construction)
- Failure to weed out provisions that are obsolete, no longer cost effective, or otherwise not consistent with the industry
- Takes too long to develop, not adequately forward looking
- Overstepping federal programs, practical business practices and common sense (e.g. Title 20 and JA8)
- Lost participation of the community in development;
- Too much influence on the process by the Statewide (Utility) Codes and Standards Program (CASE)



# LONG TERM CHALLENGES FACING THE CODE

- Health, wellness and related life and biology discoveries and evolving science
  - Do we need more light?
  - Do we need near infrared?
  - Do we need constant light?
  - Do we need a tuned spectrum?
  - Shift workers
  - What happens if we need more lumens?
- DC power and the microgrid
- Indoor agriculture
- IoT and LiFi

## WHY I AM HERE

I want to see the IES serve as it did in the past, as the primary means of bringing together all members of the lighting community together to help the CEC develop a rational, practical, sensible and cost effective code that does not prevent innovation, allows for evolution and invention, minimizes the cost of design and documentation, and ensures that Title 24 Part 6 remains the world leader in lighting energy codes and standards.

This means investing in our common future with our time, expenses and most importantly, forwarding the ideas that come from lighting manufacturers, designers, builders, salespersons, electricians, inspectors, and interested members of the public.

THANK YOU

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