# MANDATORY MEASURES SIGNAGE

(Reference: Sub-Chapter 4, Section 130.3)

# **REQUIRED CONTROLS**

**Outdoor sign lighting** must be automatically controlled by one of the following two options:

- A photocontrol and an automatic time switch or
- 2. An astronomical time switch

All outdoor sign lighting that is on during the day and night must be equipped with a control that provides the ability to automatically reduce the lighting power of the sign at least 65% at night.

Indoor signs must be equipped with:

- An astronomical time switch
   or
- 2. An automatic time switch

Section 130.3 (a) 3/22/2017 | SLIDE 186 | SECTION 6 | SIGNAGE

### **DEMAND RESPONSE FOR EMCs**

An Electronic Message Center (EMC) is an electronically controlled sign that produces pixelated images using any type of light source or lighting system.

An EMC that has a connected lighting power load larger than 15 kW must have a control installed that can reduce lighting power at least 30% in response to a demand response (DR) signal.



Section 130.3 (a)

3/22/2017

SLIDE 187

SECTION 6

SIGNAGE

# **ENERGY COMPLIANCE**

Signs must also:

- Comply with an allowed lighting power maximum
  or
- 2. Use one of several approved and compliant light sources

**Section 130.3 (a)** 3/22/2017 SLIDE 188 SECTION 6 SIGNAGE

### INTERNALLY ILLUMINATED SIGNS

Internally illuminated signs may use no more than  $12 \; W/ft^2$  of the illuminated sign area. For double-faced signs, only the area of one of the faces needs to be counted.



Section 130.3 (a)

3/22/2017 | SLIDE 189

SECTION 6

SIGNAGE

# **EXTERNALLY ILLUMINATED SIGNS**

Externally illuminated signs may use up to 2.3 W/ft2 of illuminated sign area. If both faces are lit, then both must be counted.



Section 130.3 (a)

3/22/2017

SLIDE 190

SECTION 6

SIGNAGE

### **COMPLIANT LIGHT SOURCES**

If a sign is only equipped with one of the following light sources, it does not need to meet the allowed lighting power requirements:

- 1. High pressure sodium (HPS) lamps
- 2. Metal halide (MH) lamps that are pulse start or ceramic with a ballast that has a minimum efficiency of 88%
- Neon or cold cathode lamps with transformer or power supply efficiency of: at least 75% for a rated output current less than 50 mA greater than 68% when the rated output current is at least 50 mA
- 4. Fluorescent lighting systems that only use lamps with a CRI over 80 or only use electronic ballasts with an output frequency greater than 20 kHz
- 5. LEDs with a power supply efficiency of at least 80%
- 6. CFLs that do not use a medium screw-base socket

Section 130.3 (a) 3/22/2017 SLIDE 191 SECTION 6 SIGNAGE