LIGHTING CONTROLS
There are a number of excellent automatic lighting controls that may be used to turn off exterior lights when appropriate.

1. Daylight controls, or photo sensors, used to turn off lights whenever adequate daylight is available.
2. Energy management systems and time clocks used to limit lighting to within certain operating hours.
3. Timer switches, used to turn on lights for only a short duration.
4. Motion sensors, used to either turn on lights, or turn up lights, whenever an occupant is present.

EVALUATION OF LIGHTING
The following are measures that businesses may consider to maintain illumination levels necessary for the safety of the public, employees, and property, while reducing total electrical usage:

⇒ Evaluate existing exterior lighting systems and identify non-critical lighting. Clearly label all switching devices to save time and help employees identify which lights should be shut-off at specific times.
⇒ Use only energy efficient lamp technologies wherever possible such as metal halide, induction lamps, high-pressure sodium, and linear and compact fluorescent sources. Avoid using fluorescent sources. Avoid using mercury vapor lighting systems.

⇒ Incandescent sources should be avoided unless they are integrated with a control mechanism that significantly limits the time that they operate.
⇒ Abnormally bright lights can create glare and deep shadows, which can make seeing extremely difficult.
⇒ Locate outdoor lighting where it is needed. For example, locate outdoor lighting below tree canopies, not above.
⇒ In parking lots, use efficient and cutoff lighting fixtures that emit no light above the horizontal or into the sky, fixtures that emit no more than 2.5 percent of the lamp lumens upward. Use cutoff lighting fixtures for all lamps greater than 2800 lumens. This will minimize wasted light going up into the atmosphere.
⇒ In signage and retail, use color contrast to attract attention, rather than high levels of illumination. Provide reflective surfaces for lettering or other elements that need to be illuminated at night and illuminate only the lettering, not the background.

REPORTING POSSIBLE VIOLATIONS

Possible violations of the Order should be made to your local law enforcement agency.

PLEASE DO NOT USE 9-1-1 FOR REPORTING VIOLATIONS.

To report possible violations or suggestions to the Escondido Police Department, call the Business Liaison Office at (760) 839-4948.

REDUCING OUTDOOR RETAIL LIGHTING

**Provided by the
Escondido Police Department's
Community Oriented Policing Unit**

**By order of the Governor of the
State of California**

REDUCING OUTDOOR LIGHTING

On January 17, 2001, Governor Gray Davis proclaimed a State of Emergency in California due to an electrical energy shortage. On February 1, 2001, Governor Davis issued Executive Order D-19-01 stating, "substantial amounts of electricity are consumed through unnecessary outdoor lighting by retail establishments after business hours, including but not limited to, shopping centers, auto malls and dealerships." The Executive Order requires retail businesses to substantially reduce unnecessary outdoor lighting wattage during non-business hours.

Between February 1 and February 8, the Governor's Office of Emergency Services brought together representatives from State government and the law enforcement community to draft an implementation plan that provides guidance to businesses on how to comply with the Governor's order.

GUIDING PRINCIPLES

In general, law enforcement agencies throughout California will enforce this order by utilizing a partnership approach to help retail businesses in their communities conserve energy safely. The primary principles guiding this effort include:

* Public, employee, and property safety not compromised.

* Intent of Order is to reduce wattage, not illumination.
* Businesses, in consultation with local law enforcement, will determine minimum outdoor lighting necessary.
* Enforcement sanctions used as last resort.
* Actions taken by businesses will focus on long-term conservation.

DEFINITIONS

These definitions provide clarification of the Order, which essentially calls for retail establishments to substantially reduce unnecessary lighting during non-business hours, while ensuring continued public safety.

⇒ "Non-business Hours" - Hours that business is not open to public.
⇒ "Public Safety" - Measures necessary to protect the public, employees, and their property.
⇒ "Retail Establishment" - Business that offers product or service for sale to public.
⇒ "Substantial Reduction" - Means good faith effort to reduce maximum wattage.
⇒ Businesses should target a reduction of 50 percent or more in wattage.
⇒ "Unnecessary Lighting" - Primarily marketing and decorative lighting.

ENFORCEMENT

To comply with the Governor's Order, after March 15, 2001, businesses will need to demonstrate that they have made a good faith effort to substantially reduce unnecessary outdoor lighting.

The plan calls for a targeted reduction of 50 percent or more in energy consumption, but only where public health and safety will not be threatened.

The reduction of unnecessary lighting, which is generally used for marketing or decorative purposes, will be the focus of efforts between law enforcement and businesses.

For assistance on how you can reduce outdoor wattage without affecting public, employee and building security, call the COPPS office and request a Crime Prevention Through Environmental Design evaluation at (760) 839-4955.

WASTING ENERGY

There are four ways in which light (energy) is wasted:

1. Having non-essential lighting energized especially after hours. Controls can greatly reduce the amount of energy consumed by exterior lighting.
2. Using energy inefficient equipment.
3. Sending light up into the atmosphere either by direct or reflected light. Using completely shielded or wall-mounted luminaries, light goes down instead of up.
4. Over lighting. Not only does over lighting waste energy, it may create light adaptation hazards.