



NEO Lighting

Pacific Gas and Electric Company's (PG&E) New Efficiency Options (NEO) promotes state-of-the-art lighting technologies through increased incentive rates for customers who implement the following measures:

- High-lumen fluorescent lamps with extra-efficient electronic ballasts
- High-efficiency fluorescent fixtures
- Pulse-start metal halide (MH) fixtures with electronic ballasts and functioning bi-level controls
- Innovative light emitting diode (LED) applications
- *NEO Office Solutions* lighting systems
- Lighting controls

As compared to the products and systems most commonly in use, these technologies can reduce energy costs by 10 to 35 percent while offering the same or better light quality, longer product life and lower maintenance costs.

Lighting Measures Covered By NEO

High-lumen fluorescent lamps with extra-efficient electronic ballasts

Not all fluorescent lamps and ballasts are the same. Replacing the standard existing 700 series lamps and generic electronic ballasts with high-lumen 800 series T8 lamps with extra-efficient ballasts can save significant energy, reduce operating costs, and provide better color rendering and light quality.

High-efficiency fluorescent fixtures

Replacing fluorescent T12 fixtures with high-efficiency fixtures that reduce the per-fixture energy usage by at least 55 percent are also eligible for NEO incentives. A high-efficiency fixture, as defined by NEO, is one that allows 85 percent of the light to exit the fixture.

Because more light exits high-efficiency fixtures, a lower wattage ballast and lamp combination can be specified while still providing the appropriate level of light. High-efficiency fixtures are especially well suited for use in offices, schools, and hospitals and are available as recessed troffers, retrofit kits or suspended direct/indirect fixtures.

Replacing T12 hooded industrial, wrap, or strip fixtures do not qualify. Reflector kits do not qualify.

Pulse-start metal halide fixtures equipped with electronic ballasts and functioning bi-level controls

Electronically ballasted pulse-start MH lamps are recommended for use in hi-bay applications such as warehouses and large retail stores. They can generate energy savings when replacing other high intensity discharge (HID) fixtures, such as mercury vapor, low-pressure sodium, and high-pressure sodium. Compared to standard probe-start lamps and ballasts, the pulse-start electronically ballasted MH systems offer 20 to 30 percent more efficient operation, 50 percent longer lamp life, flicker-free operation and faster re-strike time. Active bi-level controls may provide additional energy savings and are required for NEO incentives.

Innovative LED applications

Recent technology improvements to LEDs have helped make some products a more cost-effective energy saving option. Appropriate applications for LED products include areas with long operating hours, difficult maintenance requirements or directional lighting needs. Some examples include replacing recessed can downlights, HID parking garage and pole-mounted fixtures and task lighting systems.





To qualify for NEO incentives, LED products require pre-approval and the submission of IES-LM-79 and IES-LM-80 test reports from an independent testing laboratory. Contact the NEO program for more details on additional approval requirements.

NEO Office Solutions lighting systems

NEO Office Solutions are low wattage ambient lighting systems supplemented with personal task lighting. Recent case studies have shown this combined approach can decrease energy usage by 25 to 65 percent as compared to existing T8 systems. As an added benefit, these systems increase occupants' comfort by giving them more control over their workspaces.

Lighting controls

Lighting controls can be programmed to turn off or to dim lights on schedule, when the area is not occupied, or when there is adequate daylight entering the room. Lighting controls are especially recommended for buildings with areas of variable usage and areas with ample daylight.

Benefits Of NEO Participation

NEO offers financial incentives to help offset upfront costs and provides free technical assistance to ensure participants receive the appropriate NEO lighting technologies.

Technical Assistance

PG&E provides NEO participants with no-cost expert consultation with professionals who are proficient with the newest, state-of-the-art technologies. Our experts will provide customized written specifications to ensure maximum savings and will provide continued support to guarantee customer satisfaction.

Financial Incentives

NEO lighting incentives equal \$0.07 per kWh plus \$140 per Peak kilowatt (kW) reduced, which can cover nearly 30 percent of lighting installation costs and help reduce the payback period of a new lighting system.

Eligibility Requirements

NEO participants must be PG&E nonresidential electric customers who pay the public purpose surcharge found on most commercial electric accounts. The minimum NEO project size is 20,000 square feet or 3kW reduced for LED or exterior applications.

For Additional Information

To learn more about NEO lighting technical assistance, project eligibility and other NEO offers, call **1-866-348-2399**, email NEO@pge.com or visit www.pge.com/NEO.

