

You should know...



North Dakota Public Service Commission

Issue PUD/E-2, January 2008



North Dakota Public
Service Commission

Commissioners:
Susan E. Wefald
Kevin Cramer
Tony Clark

600 E Boulevard Ave.
Department 408
Bismarck ND
58505-0480

Telephone:
701-328-2400

Facsimile:
701-328-2410

TDD/TTY:
800-366-6888

E-mail:
ndpsc@nd.gov

Website:
www.psc.state.nd.us

Compact Fluorescent Light Bulbs

About Compact Fluorescent Light Bulbs

Installing compact fluorescent light bulbs can save a significant amount of electricity in a home or business. Depending on the brand, they generally use up to 75 percent less electricity than a standard incandescent bulb. However, CFLs may not be suitable for all light fixtures and lighting conditions.

Because compact fluorescent bulbs have become a popular replacement bulb, they can be purchased in a variety of stores, even in your local grocery store. Although they cost more than incandescent bulbs, compact fluorescent bulbs may last up to 10 times longer than incandescent bulbs. However, the life of a CFL will vary depending on how they are used.



Tips for using CFLs

There are a few things to think about before replacing your incandescent bulbs with CFLs. The following tips are from energystar.gov, a joint program of the U.S. Environmental Protection Agency and the U.S. Department of Energy:

- The life of a CFL can be shortened if it is turned on and off frequently. It is recommended that they be used in fixtures where lights are typically on for at least 15 minutes at a time.
- Not all CFLs are made to be used with dimmer switches.
- CFLs take longer to reach their brightest level when used in cold temperatures.
- CFLs use less wattage to produce the same amount of light. The following chart shows a comparison between CFLs and incandescent bulbs:

Incandescent vs. Compact Fluorescent		
Incandescent Wattage	Light Output (Lumens)	Compact Fluorescent Wattage
40	450	9-13
60	800	13-15
75	1,100	18-25
100	1,600	23-30
150	2,600	30-52

The reader agrees that use of this information is entirely at the customer's own risk. The Public Service Commission's services are provided "as is," without warranty of any kind, either expressed or implied, including without limitation any warranty for information provided through or in connection with this service.

Compact Fluorescent Light Bulbs (cont.)

Federal Legislation Regarding Lighting

In the Energy Independence and Security Act of 2007, Congress set an energy efficiency standard for general service incandescent lamps increasing efficiency standards by 30 percent and effectively phasing out most common types of bulbs by 2012 to 2014. This legislation also provides for consumer education and lamp labeling, and requires market assessments and a consumer awareness program.

Fluorescent Lights Contain a Small Amount of Mercury

The following information is from energystar.gov: All fluorescent lights, including CFLs, contain a small amount of mercury. CFLs contain a very small amount of mercury sealed within the glass tubing – an average of 5 milligrams – about the amount that would cover the tip of a ballpoint pen. By comparison, older thermometers contain about 500 milligrams of mercury. It would take 100 CFLs to equal that amount.

Disposal of Fluorescent Bulbs

The North Dakota Health Department encourages recycling of fluorescent bulbs, but households may put their compact fluorescent bulbs in the trash. If bulbs are placed in the trash, seal them in two plastic bags.

How should I clean up a broken fluorescent bulb?

The following information is from energystar.gov:

1. Open a window and leave the room for 15 minutes or more.
2. Carefully scoop up fragments and powder with stiff paper or cardboard and place them in a sealed plastic bag.
3. Place all cleanup materials in a second plastic bag.
4. If a fluorescent bulb breaks on a rug or carpet:
 - a. First remove all materials you can without using a vacuum cleaner. Sticky tape may be useful.
 - b. If vacuuming is needed, vacuum the area where the bulb was broken, remove the vacuum bag and place in two sealed plastic bags in the outdoor trash.