Concord Municipal Light Plant – Sustainability Initiatives

**Headquarters and Garage**

*Daylighting*
Five light shafts bring daylight from the CMLP Headquarters roof into the interior of the building, reducing the need for electric lighting.

*Internal/External Lighting*
CMLP uses more efficient 277 volt lighting in office areas, which reduces electricity line losses as well as the amount of copper needed for wiring. Motion controlled lighting in the office, garage and warehouse areas cuts down on unnecessary lighting use. High efficiency LED lighting is used in the CMLP parking lot and in bollards lighting the walkways to the building. Efficient metal halide lighting is used in the garage and warehouse.

*Heating and Air Conditioning*
CMLP heats its headquarters and substation buildings with electric thermal storage (ETS) systems, supplemented by highly efficient air-source electric heat pumps. ETS units are typically charged during the night, when only the most efficient generating plants are operating. Because the timing of ETS system charging is controlled by CMLP, the systems can also be used to balance out the variability of electricity produced by renewable electricity sources, such as wind power. Pilot projects carried out by CMLP show that controlled ETS systems have significant potential for carrying out this regulatory function. This function will be increasingly important as the contribution of renewable energy to our power supply continues to grow.

A programmable thermostat also controls CMLP’s heat pumps, which provide cooling in the summer as well as supplemental heating in the winter. The thermostat lowers the building’s winter temperature at night and on holidays and weekends when the building is unoccupied, and lets the temperature rise during these unoccupied periods in hot summer weather.

*Peak Electricity Demand Curtailment*
CMLP headquarters participates in CMLP’s Google Group peak demand reduction effort by turning off some lighting and water heaters, and raising air conditioning temperature settings on certain hot summer days until peak demand time has passed. For CMLP headquarters, these actions result in a small overall reduction in electricity consumption compared to what would have otherwise been used during the year.

*Water Conservation*
Restrooms at CMLP headquarters feature water conserving dual-flush toilets, waterless urinals and self-closing faucets.

*Recycling*
Paper and bottle and can recycling stations in the employee lunchrooms, mail area, copy room and at desk side make it convenient for employees to recover recyclable materials. The cardboard boxes in which supplies and equipment are delivered to CMLP are also recycled. Finally, CMLP maintains a
fluorescent bulb recycling station at headquarters, where members of the public can drop off bulbs for recycling through a Concord Public Works-sponsored program.

**Recycled Products**
The tissue and napkin products used in the restrooms and lunchrooms at CMLP are manufactured from 100% recycled paper.

**Reuse**
CMLP employees utilize reusable interoffice envelopes for sending paperwork between Town departments. CMLP encourages its employees to print and copy documents double-sided whenever possible, and some employees reuse paper with one blank side when printing. CMLP reuses waste oil from its vehicles as a heating fuel to warm the maintenance bay during the winter.

**Janitorial Supplies**
CMLP custodial staff uses Zep’s Greenlink cleaning products, which use responsible chemical formulations to minimize negative impacts on the environment. Zep’s Greenlink product line includes products certified by Green Seal, EcoLogo and Design for the Environment.

**Transportation**
CMLP currently has three hybrid vehicles in its fleet.