ADMINISTRATIVE RESOLUTION 2014-4

ENERGY CONSERVATION POLICY

LAKE OF THE WOODS ASSOCIATION, INC.

RESOLVED, the Board of Directors hereby establishes the following policy governing all Lake of the Woods, Association, Inc. energy conservation efforts and directs the General Manager or designee to carry out the policy for the Association.

SECTION 1

A. PURPOSE

Lake of the Woods Association is committed to a policy of energy efficiency and energy conservation in its current facilities and all new construction. LOWA’s goal is to implement conservation and sustainability measures to allow us to use only the energy needed to support the Association’s mission, and to be a better steward of our natural environment. The Association spends a significant amount of money annually on energy (electricity, propane, fuel, water and sewer). Thus, the Association has adopted this policy to promote energy conservation and savings.

The purpose of this policy is to clearly define the goals and objectives for LOWA, in respect to the reduction of energy consumption in our buildings and common properties in a manner consistent with the LOWA Master Plan.

B. POLICY:

It is LOWA’s policy to incorporate energy saving aspects into the specifications for all procurements involving energy consuming products and systems, including guide specifications, project specifications, construction, renovation, and service contracts that include provision of energy consuming products and systems, and into the factors for the evaluation of offers received for the procurement, criteria for energy efficiency that are consistent with Energy Star products. Procurement of items is also in accordance with LOWA Governing Documents, Procurement Manual, Reserve Studies, and Asset Management policy and procedure.

C. ROLES AND RESPONSIBILITIES

1. **Board of Directors** – The Board establishes and oversees the Energy Conservation Policy as part of its responsibility to the members of the Association. The Board delegates certain responsibilities to the General Manager.

2. **General Manager and Staff** – The General Manager or his designee is authorized to carry out the policy for the Association. This policy is applicable to all employees. Operation Centers (OC) Managers and Foremen are responsible for maintaining control and accountability for the buildings and equipment in their OC.
3. **Committee**- M & E Committee will advise the Broad and General Manager on energy conservation matters.

**D. GOALS:**

1. Reduce energy consumption by 10% by 2020;
   - Reduce electric power consumption by 10% by 2020
   - Reduce water consumption by 10% by 2020;
   - Reduce fuel consumption (gasoline, diesel, propane) by 10% by 2020;
   - Reduce paper consumption by 10% by 2020;
2. Seek environmentally neutral sources of heating, cooling, and energy;
3. Reduce pollution, waste and emissions.

**E. REPORTING:**

Annually in June, the Board will review the plan. The Board will discuss previous year's energy savings, goals, special projects, and energy audits. Information will be received in time for the following Capital cycle.

**SECTION 2**

**A. New Construction**

New construction is to be designed and built to minimize energy use. The most recent version of ANSI/ASHRAE/IESNA Standard 90.1-1999 is set as the minimum energy efficiency guideline, since it has been shown that further reductions in energy use are economically achievable. The design process is to include energy life cycle costing analyses. Alternative energy sources such as passive solar heating and heat recovery is to be considered, as well as day lighting and other strategies for decreasing building energy consumption in accordance with green building concepts. Primary consideration is to be given to connecting and/or extending central systems for heating, cooling, and other electrical and lighting systems. Year-round cooling needs should be met by utilizing the most energy efficient systems. All new construction should include utility metering (electricity, propane and water).

**Solar Panels:** Special consideration will be given to installing solar panels on existing buildings and newly constructed buildings. Each new project will be evaluated to determine the return on investment costs and life cycle costs.

**Geo-Thermal:** Special consideration will be given to new construction projects in the use of heat recovery systems such as geo-thermal. Each new project will be evaluated to determine the return on investment costs and life cycle costs.

**B. Existing Structures**
1. Buildings

Building shall be operated and maintained in such a manner to conserve energy and resources. When building components are scheduled for replacement, the components are evaluated to ensure the most efficient products are used.

Energy surveys are to be conducted on each LOWA structure every five years. Deficiencies noted are to be corrected as soon as funds are available.

2. Landscaping

Landscaping shall balance aesthetic beauty with energy conservation. Landscaping shall be maintained in such a manner as not to waste resources such as water and chemicals. Erosion of landscaping features is to be prevented to reduce pollution caused by runoff. When vegetation is replaced, the vegetation shall be of a type requiring minimal irrigation and is resistant to insects.

3. Lighting

Lighting on Association buildings and outdoor areas will be upgraded to high efficiency lighting such as LED when funding is available. New construction and remodels will use high efficiency lighting and eliminate incandescent lighting where possible. Light sensors will be utilized in buildings to eliminate lights being left on. Interior decorative lighting will be kept at a minimum and exterior decorative lighting is discouraged. Lighting levels recommended by the Illuminating Engineering Society Lighting Handbook is to be used as guidelines to avoid over-lit spaces. Use of motion-activated light controls will be implemented as funding allows.

4. Heating

Occupied spaces shall be maintained between 66-70°F.

5. Cooling

During the warmer months, room temperatures should be maintained at 70-74°F when occupied.

If facilities are uncomfortably warm, employees should contact Maintenance Department before opening windows. If windows are open when the building’s cooling system is operating, this will unnecessarily stress the cooling system, and overall will result in a less desirable environment, and higher than normal energy consumption.

6. Purchasing

Energy efficient products will be purchased whenever possible. For examples, see the U.S. Environmental Protection Agency Energy Star products list. Recyclable and reusable products will also be purchased when feasible to reduce disposal costs.

SECTION 3
A. Employee Responsibilities

This Energy Conservation Policy is created to lower energy consumption through employee action. Occupants of LOWA buildings have a major part to play in reducing energy use;

The policy is applicable to all LOWA employees and is broken out into six major categories.

1. Lighting
   - Employees shall make every effort to reduce the amount of energy associated with lighting in all LOWA facilities by:
     - Turn lights off in unoccupied spaces.
     - Discontinuing the use of incandescent lighting wherever more efficient lighting is possible such as light emitting diode (LED) bulbs.
     - Maximizing the use of natural light and turning off all nonessential lighting whenever possible.
     - Utilizing task lighting in lieu of overhead lighting when appropriate.
     - Personal safety shall not be compromised from lighting energy reduction decisions.

2. Interior Environment
   - Every effort will be made to maintain the occupied temperature in all LOWA facilities at 66-70 degrees in the winter and 70-74 degrees in the summer. This excludes areas that currently are not heated or cooled and areas with special environmental needs.
   - The temperature during low occupancy or unoccupied periods in all LOWA facilities will be allowed to cool down to 60 degrees in the winter and warm up to 85 degrees in the summer. This excludes areas that currently are not heated or cooled and areas with special environmental needs.
   - Employees with manual control of the equipment that heats or cools their space shall operate the equipment so that the least amount of energy is consumed.
   - Every effort will be made to improve the utilization of our buildings by consolidating activities from lower utilized buildings into higher utilized buildings. This will allow building heating; ventilating and air conditioning system run times to be reduced, resulting in energy savings.
   - If you use either a ceiling fan or a small fan to move air for comfort, do not leave it running when you are away from your desk.
   - Portable electric heaters are permitted with Department head approval. Portable electric heater must be turned off when the space is not occupied and at the end of the work day.
   - Dress appropriately for the season.

3. Computers
   - Energy saving features shall be enabled. Computers shall hibernate after 30mins of no use.
   - Computers are required to be ENERGY STAR and EPEAT labeled unless suitable justifications are approved by the appropriate Energy conservation Controller.
   - Peripheral equipment shall be turned off whenever possible.

4. Office Equipment and Paper Use

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• All powered office equipment shall be turned off or placed in standby when not in use, unless it is detrimental to the operation of the equipment to do so. Items such as calculators, shredders, paper folding equipment, are to be turned off at the end of the work day.

• Office equipment quantities shall be reduced through consolidation to central locations for shared use whenever possible.

• Office equipment purchased with LOWA funds is required to be ENERGY STAR labeled unless approved by the responsible budget executive.

5. Appliances

• All new or replacement appliances are required to be ENERGY STAR labeled. Exceptions are authorized if there are no Energy Star rated appliances manufactured that meet the user’s needs.

• All appliances shall be turned off when not in use, unless it is detrimental to do so (for example a refrigerator or freezer).

6. Vehicles and Fuel Use

• All LOWA vehicles are to be operated in a safe and efficient manner. Accelerate gently to conserve fuel and reduce wear and tear on the vehicles.

• Use the most direct route to transit from one work location to another.

• Shut off vehicle when not being operated. Allowing a vehicle to idle is not permitted unless required in the performance of a task.

• It’s the operator’s responsibility to ensure the vehicle is in proper working order. If discrepancies are found, the vehicle is to be taken to the maintenance shop for repairs.

• At the scheduled time for replacement, each vehicle shall be evaluated for: energy efficiencies, intended use, fuel economy, projected maintenance expenses. Where possible, vehicles shall have multiple uses. Example: purchasing a dump truck with a crew cab may eliminate the need for additional vehicles to transport workers.

Effective Date: June 7, 2014

LAKE OF THE WOODS ASSOCIATION, INC.

By: James Walsh, President

ATTEST: I, as Secretary for Lake of the Woods Association, Inc., hereby attest that the foregoing Administrative Resolution 2014-4 was adopted by the Board of Directors at a duly-held and noticed Board of Directors meeting held on the 7th day of June, 2014.

Louisa Rucker, Secretary