California Science Center



CALIFORNIA STATE SCIENCE FAIR 2001 PROJECT SUMMARY

Your Name (List all student names if multiple authors.)

Nicole M. Serhan

Project Title (Limit: 120 characters. Those beyond 120 will be ignored. See pg. 9)

The Effects of Temperature on Electrical Energy Use and Energy Conservation Awareness

Science Fair Use Only

J1711

Division
X Junior (6-8) Senior (9-12)

Preferred Category (See page 5 for descriptions.)

2 - Behavioral Sciences

Abstract (Include Objective, Methods, Results, Conclusion. See samples on page 14.)

Use no attachments. Only text inside these boxes will be used for category assignment or given to your judges.

This experiment studies the effects that temperature has on electrical energy use and energy conservation awareness through energy monitoring devices. Energy consumption throughout California has been a major problem. Energy prices are rising and are causing higher prices for the public especially elderly people because they sometimes do not have the financial means to pay their monthly bills without being a burden to them. People cannot afford to run their air conditioning when it is hot in the summer months or their forced-air heating equipment in the winter months. This experiment will attempt to prove that if consumers are educated about the relationship between temperature and energy that they will be more conservative in the use of energy to meet their energy needs. The more energy that a person uses the higher the cost will rise which is reflected in the California marketplace today. Consumers must learn to decrease their use of energy to help force the pricing to a lower level. Additionally, the experiment will touch on energy use display units and their influence on consumer energy use awareness. The idea here is that if a consumer can be reminded of his energy consumption, monitor the quantity of energy use and its cost, the consumer will be moreprone to conserve energy use. If consumers learn to follow this strategy on conserving their energy, they can lower the cost on their electric bill.

Summary Statement (In one sentence, state what your project is about.)

An experiment to show the effects of temperature on energy use.

Help Received in Doing Project (e.g. Mother helped type report; Neighbor helped wire board; Used lab equipment at university X under the supervision of Dr. Y; Participant in NSF Young Scholars Program) See Display Regulation #8 on page 4. Father helped build display case. Mother helped with display board.