



# PepsiCo – Puerto Rico Energy Savings Case Study



## Subject Information

Facility: **PepsiCo – Puerto Rico**  
Facility Type: **Manufacturing Plant**

PepsiCo is one of the world’s largest food and beverage companies. Their facility in Puerto Rico was consuming approximately \$2 million in electricity annually to power their operations. The plant’s management had some concerns about the quality of power at the facility and began seeking solutions that both provided power quality improvements and reduced the cost of the plant’s annual electric bills. EIS provided a solution that included lighting retrofits and controllers, reactive power factor correction, passive harmonic correction filters, and polarized refrigerant oil additives. The actual electricity savings of 15.1% surpassed the guaranteed savings of 10.9%, yielding a payback period of just 20 months.

Savings Analysis		
	Guaranteed	Actual
Monthly Savings	10.9 %	15.1 %
Payback Period	21.5 months	13.4 months
Annual Cost Savings	Over \$302,000	
Technologies Used	Lighting Upgrades, Power Quality Enhancement, Refrigerant Oil Fouling Mitigation, Harmonic Correction Filters	

### **Luis Lora, Engineering Manager:**

*The system has been operating flawlessly since March 2007. The improvements we have seen in overall lighting, equipment performance, and power factor have undoubtedly had a positive impact in equipment longevity and overall facility performance. The EIS integrated approach to increase efficiency in all loads - including motors, lighting, air conditioning and refrigeration - has proven effective as a unique alternative toward energy cost reduction at Pepsi Manufacturing International.*

*Here at Pepsi we have also been favorably impressed with the entire Energy Integrated Solutions (EIS) process. All steps - that includes the preliminary evaluation, energy survey, pre-installation, and the installation - were conducted with the highest degree of professionalism, level of communication and participation between our teams to make it a very successful and fulfilling activity.*

### **Environmental Benefits**

- ✓ 2,457,000 lbs CO<sub>2</sub>
- ✓ 2,581 Barrels of Oil
- ✓ 1,188 Tons of Coal
- ✓ 18,701 lbs of SO<sub>2</sub>
- ✓ Equivalent to removing 235 Vehicles

### **Additional Benefits**

- ✓ Motors Run Cooler
- ✓ Improved Lighting Quality
- ✓ Maintenance, Repair, & Operations, (MRO) Savings
- ✓ No Special Training or Employee Involvement