

New Electric Vehicle at Parking Garage



Al Smith, Director of General Services, and Bob McKeeney, Special Projects Coordinator III, admire the new GEM.

Recently put into service in the Governmental Center parking garage, the electric GEM car is the latest introduction of an alternative fuel/advanced technology vehicle in Broward County Operations. The vehicle runs solely on electricity, produces zero tailpipe emissions, seats 4 adults comfortably, and is small enough to maneuver through the garage assisting customers without hindering the flow of traffic. Electric vehicles (EVs) are not new to Broward County. At one time, we maintained the largest electric vehicle fleet in the State. Our experience with EVs played a role in transitioning the industry to the latest technology, hybrid electric vehicles (HEVs). The GEM car allows us to continue our experience with all-electric vehicles as it is the appropriate technology for the application. Next time you are on the ground level of the parking garage, take a moment and check out this little GEM.

Recovery Role after Wilma

Everyone has a story regarding the past hurricane season and the media has provided us with many more. These stories combine to form our regional memories of these trying times. However, not all stories make the papers. What happens behind the scenes as we try to recover from these events can be informative as well.

From the operational perspective, responsibilities include getting fuel to the response vehicles, powering up buildings with emergency electrical power, clearing parking lots and streets, providing essential services and supplies to the community and much more. Here at Energy & Building Automation, the responsibilities of the Environmental Health and Life Safety section during this active phase of recovery included inspecting, assessing and repairing life safety systems, such as, fire alarms, automatic sprinkler systems, fire pumps and the associated components of each of these. It's a small team made up of Rick Miles and Gary Meece.

As FP&L or emergency back-up electrical generators powered buildings up, many of our fire alarm systems were in "Trouble". This "Trouble" is actually what the panel says, written in flashing text on the fire alarm panel. It is then necessary to determine what the "Trouble" is and repair or reset the equipment. Often the repair is simple, sometimes not. Lightning strikes associated with these major storms and power surges resulting from fluctuating electrical power can cause significant damage to fire alarm systems. Some of our fire sprinkler systems were damaged in buildings where the wind got inside the building and did its best to wreak havoc on everything inside.

We prioritized our inspections and assessments to first accommodate any residential care facilities. Persons housed at these sites are most vulnerable to potential harm in the event of a life safety systems failure. Next, we checked the largest and most damaged buildings. By the Friday following Wilma's arrival, we had all systems inspected and, at the least, temporarily operational. Some repairs are necessary, but at this time, all buildings that were previously covered by a functional life safety system, have been inspected, put back into service and repair orders issued for those that required service from various vendors.

Year 2005 At a Glance



June 14: Proclamation declaring June 23, 2005 "Alternative Fuel and Advanced Technology Vehicle 5 Million Miles Day", as presented by the Board of Commissioners in commemoration of 5 million miles driven on alternative fuels. (L to R: Tony Rosa, Mayor Kristin Jacobs, Rosalia Bunge and Bob McKenney)



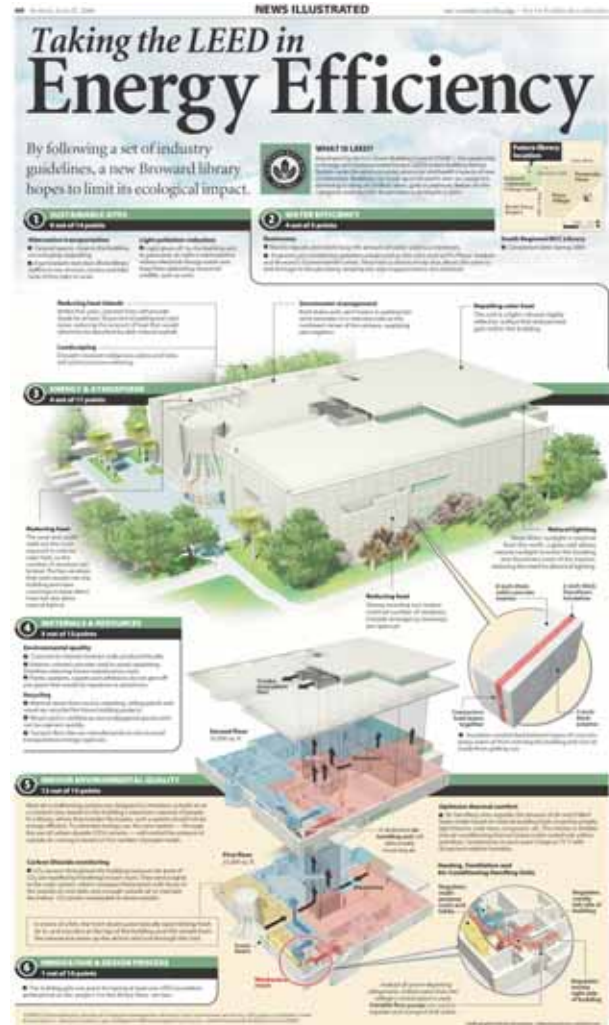
October 19: Tony Rosa, Chief of the Energy & Building Automation Section, spoke on Environmental Benefits of Energy Efficient Programs at The National Registry of Environmental Professionals (NREP) Conference.



June 23: Breakfast hosted by the Alternative Fuels & Advanced Technology Section of Energy to thank employees who used alternative fuel vehicles to perform their duties at the same time, contributing to the 5 million miles achievement



October 14: Bob McKenney and Rosalia Bunge of the Alternative Fuels & Advanced Technology Section and staff of the Air Quality and Mass Transit Divisions joined the U.S. Department of Energy's National Clean Cities in celebrating the displacement of more than 1 billion gallons of gasoline through the use of alternative fuels.



Schematic of the new Broward County South Regional Library under construction. A major responsibility of the Energy & Building Automation Section in this project is to ensure compliance with the LEED certification point system. This will be the first Broward County building to be LEED certified and completion is estimated for Spring of 2006.

Notable Team Achievements/Activities/Results for the past year:

Alternative Fuel Vehicles

- Surpassed 5,000,000 miles driven with a Proclamation from the Board on June 14, a breakfast for drivers on June 23, and promotions in the CountyLine and Governmental Center lobby electronic board. The milestone cumulatively represents more than \$170,000 in fuel cost savings, 1,000,000 pounds of tailpipe emission reductions, and about 290,000 gallons of gasoline displaced.
- From follow-up with contacts made at Clean Cities Conference, began correspondence with Honda by meeting with them locally and following-up with a letter of interest signed by the Mayor demonstrating our interest to introduce a hydrogen vehicle into county operations.
- Registered and acquired 24 decals for qualifying county AFVs to use HOV lanes and promoted advantages to our drivers in a CountyLine feature and on the BC-Net.
- To promote increased awareness of program, new AFV Supervisor met with Directors and Managers at Fleet Services, Traffic Engineering, Highway and Bridge Maintenance, Water and Wastewater Operations, Port Everglades, Mass Transit, Parks and Recreation, Medical Examiners Office, Elderly Services, Aviation and Environmental Protection.
- Provided interviews and access for live broadcast on WPLG Channel 10 news feature on high gasoline prices and Broward County's AFV efforts.

Energy Efficient Buildings

- Continued participation with CMD Library Bond and other new construction projects in providing energy-efficient equipment, life safety systems, and building automation construction specifications.
- Continued generation and distribution of monthly energy usage and green building reports.
- Completed second year panel replacement/upgrade program for Main Library.
- EE Buildings Supervisor had two-part "Wishful BAS Specification" article published in CSE magazine.
- Completed lighting retrofit at Fleet #2, reducing monthly electric bill by 20%.

Environmental, Health, Life Safety

- Fine-tuned fire alarm inspection procedures to meet NFPA requirements for thorough inspection of systems.
- Assisted FSD & FMD with underground tank inspections without violations or fines. Assisted in reconciliation of other environmental compliance items including interstitial monitoring, tank registrations, EAR reporting, SARA Title III reporting, storm water management maintenance, and chlorine monitoring in a confined space.
- Continued to manage the BSO fuel site mitigation project to include continuing inspections and reporting as well as correspondence with BSO officials.
- Performed nine asbestos inspections and reports since January and Electronic Technician Shop has reduced the total number of jobs to be completed to 22.

Thanks go out to the entire E&BA team for another successful year!



Alternative Fuel Vehicle Performance Update

for Fiscal Year 2005

<i>Miles Driven</i>		<i>Fuel Cost Savings</i>		<i>Pollution Prevention</i>	
CNG	629,555	CNG	54,207	CO2	197,652 lbs
LPG	209,731	LPG	15,863	CO	6,069 lbs
HEV	54,283	HEV	3,587	NOx	249 lbs
EV	2,572	EV	254		