Study compares power plants across North America
By Morgan Lee, Associated Press Writer
S.F. Chronicle, Tuesday, January 11, 2005

MEXICO CITY (AP) -- Mexico produced relatively little mercury and carbon dioxide, but still accounted for some of the dirtiest fossil-fuel electricity power plants in North America, according to a NAFTA watchdog group study released Tuesday.

The Commission for Environmental Cooperation -- an outgrowth of the North American Free Trade Agreement -- said it has collected for the first time comparable statistics on atmospheric emissions from more than 1,000 fossil-fuel power plants in Canada, the United States and Mexico.

Its study found a small percentage of facilities across North America release much of the electricity sector's sulfur dioxide, nitrogen oxides, and carbon dioxide emissions -- substances known to contribute to acid rain, haze, smog and climate change. The report also documented releases of mercury, a toxin that accumulates in fish eaten by people.

Report co-author Paul Miller said the emissions data from 2002 provides a "snapshot in time" that can be used to evaluate changes in pollution in the future.

Coal-fired power plants are the dominant source of harmful air emissions from the electricity sector in the region, the study found. And Mexico's three coal-fired power plants -- two near the Texas border in Coahuila state and one in the southern state Guerrero -- are among the country's dirtiest plants in terms of air pollution.

But Mexico produced less mercury and carbon dioxide overall and less carbon dioxide per unit of energy than the United States and Canada -- a consequence Miller said of the Mexico's low dependency on coal.

Mexico gets about 8 percent of its electricity from coal, according to the study. In contrast, about 50 percent of U.S. power comes from coal, it said.

Nevertheless, two Mexican plants topped lists for other pollutants.

The Jose Lopez Portillo plant in Coahuila was the top source of nitrogen oxides in North America in 2002. And an oil-powered generation plant in the Gulf-coast state of Veracruz ranked first as a source of sulfur dioxide on the continent, the study found.

Mexico's state-owned power utility, the Federal Electricity Commission, or CFE, could not immediately comment on the accuracy of the study.

CFE spokesman Estafano Conde said the country is gradually "migrating" toward more natural gas generation -- along with non-fossil fuel generation -- while expanding electricity production over the next 10 years.

Flying J has 'big plans' for refinery
Company officials impress employees with strategy once takeover is approved
By ERIN WALDNER, Californian staff writer
Bakersfield Californian, Wednesday, Jan. 12, 2005

If you've heard of Flying J, it's probably in reference to the six truck stops in California that bear the name.

"People as a whole don't know a lot about us," said Jeff Utley, vice president of refining operations at Flying J Inc.

This could soon change.

The Ogden, Utah-based company has plans to expand its presence in California.

Utley said Tuesday that in addition to shoring up the Shell Bakersfield Refinery -- which it's buying to the reported tune of $130 million -- the company wants to build four to six more travel
plazas, its name for truck stops, and expand its trucking operations in California. The company currently has six truck stops in the state, two of which are near Bakersfield.

Utley also said it's possible Flying J will resume oil production operations in California, which it sold off about five years ago. He said the company could find new production opportunities in Kern County.

Utley and three colleagues are in town to meet with employees of the refinery. Their first meeting was Tuesday morning, when they briefed employees on the company and its growth strategy in California.

"It's unreal. I didn't realize they had such big plans for California," Alan Gettman, an employee at the refinery, said later.

Gettman, who works in the safety department, said Flying J officials used the phrase "long-term" when discussing their plans for the refinery -- a phrase workers there are unaccustomed to hearing. The refinery has undergone numerous ownership changes since it was built in 1932.

Big West Oil LLC, a wholly owned subsidiary of Flying J that's the actual entity buying the refinery, owns and operates a small refinery in North Salt Lake, Utah. Utley said the refinery was built in 1948 and in its history, has gone through five ownership changes. He said Flying J has owned it the longest.

Utley said Flying J would "love to hire the folks here" to continue operating the Bakersfield refinery. The plant employs around 200 people.

Gary Winton, who runs the computers that run the refinery, said employees at the morning meeting told the team from Flying J, "We will make you glad you bought the refinery."

Both Winton and Gettman said they were excited when they first learned Flying J was buying the refinery -- and even more excited after the meeting, when they heard more about the company's plans.

Utley said Monday that Flying J wants to double the refinery's gasoline output.

On Tuesday, he said this would most likely be done by installing a fluid catalytic cracker, which converts gas oils into lighter products, such as gasoline. The refinery currently sells a lot of its gas oils to refineries that have this kind of technology.

Winton said by installing a cracker, Flying J would not have to run more oil through the refinery in order to produce more gasoline.

The refinery produces 2 percent of the state's gasoline supply and 6 percent of the diesel.

Winton, who has worked at the refinery for 19 years, said he was excited about the possibility of increasing the plant's output. He said this was something previous owners talked about, but never did.

Utley said the Bakersfield refinery will help supply Flying J's California travel plazas with fuel. Each truck stop consumes an average of 2,000 barrels a day.

In its deal with Shell, Flying J will acquire the Shell gas station that fronts the refinery on Rosedale Highway. Utley said it will become a Flying J station.

Utley said the refinery will be renamed, most likely Big West Oil LLC of California.

Shell is leasing Flying J a products terminal adjacent to the refinery. Utley declined to say how long the lease is for; only that it's "very long-term."

Flying J also will get access to Shell pipelines that feed the refinery oil.

If the refinery's sale is approved, Utley expects Shell to exit the picture and Flying J to assume daily operations by the end of March or April.
Somewhere over the rainbow
Carmakers tout a hydrogen economy at the L.A. Auto Show. But promises are lighter than air.
By Dan Neil, Los Angeles Times, Jan. 12, 2005

To know what strange times these are in the automotive world, you need only contemplate the words: hydrogen-powered Hummer.

At first glance - and second and third - using hydrogen to power a 3-ton SUV seems a sadly comical misapplication of technology. Why not a bulldozer powered by hydrazine rocket fuel or a minibike shot through with plutonium fuel rods? Why not capture 3.5 billion fireflies and use their precious incandescence to power a Buick?

And yet, there it sits on the floor of the Los Angeles Convention Center, a big, Dalton blue Hummer with an enormous carbon-fiber bottle in the back. Such monstrosities can only come from monstrous egos, and sure enough, behind the H2H - pushing it uphill, straining our credulity - are California Gov. Arnold Schwarzenegger and General Motors Vice-Chairman Robert Lutz, who made a personal appearance to deliver the vehicle in October. GM's interest is obvious enough. The Hummer brand has become synonymous with a kind of ecological infantilism - to drive one is to be seen as throwing a tantrum over inconvenient facts such as America's addiction to foreign oil and global warming. Anything to paint this pig green is a help.

I support the Hydrogen Highway program - whatever its current shortcomings - but the H2H exemplifies a distressing contempt for seriousness. And by the way, GM claims the H2H - powered by a 6.0-liter supercharged V8 supplied by a 6-kilogram tank of hydrogen - has a range of 60 miles. My Aunt Fanny.

Environmentalists looking for hopeful signs in the auto industry will find the Los Angeles Auto Show (open through Sunday) something of a letdown. One reason has to do with the show's unfortunate timing just before the monster auto show in Detroit, known officially as the North American International Auto Show, a title that only hints at Detroit's oxygen-consuming comprehensiveness.

In Detroit this week, show-goers will marvel at the General's latest hydrogen fuel-cell concept car, the Sequel, a surprisingly handsome science experiment that its makers claim has a range of 300 miles, the magic number in alt-fuel circles. Also on the GM stand is an Opel Astra concept with a diesel-electric full-hybrid powertrain. GM has had a come-to-Jesus moment regarding hybrid powertrains and will offer them in numbers by 2007.

In fact, if anything, the L.A. Auto Show is a bit of a retrograde moment. Consider, for example, the Venturi Fetish, which its makers call the world's first production electric sports car. About the size and weight (2,400 pounds) of a Lotus Elise, the two-seat Fetish is powered by a 242-horsepower electric motor with the oomph to accelerate the car to 60 mph in less than six seconds. It claims a range of up to 220 miles (see above regarding my Aunt Fanny).

Unfortunately, the car - built in Monaco, where I reckon hand labor is pretty expensive - sells for $660,000, which it hardly seems necessary to point out is stupid. Far from promoting battery-electric vehicle technology, the Fetish seems to discredit it.

Another sexy but deeply frivolous alt-fuel exercise is BMW's H2R, a gorgeous single-seat racer with the silvery fluted surfaces of a zeppelin. Previously seen at the Paris Auto Show in 2004, the 6.0-liter, 12-cylinder H2R is the world's fastest hydrogen-powered car, the holder of nine world records. BMW advocates burning hydrogen in conventional, piston-driven engines as opposed to running it into a fuel cell to produce electricity - tempting, because fuel cell units currently cost hundreds of thousands of dollars and are fairly balky. In fact, BMW announced it would sell a "bi-
fuel" gasoline/hydrogen version of its current generation 7 series sedan.

But how far does this get us toward the hydrogen economy? Burning hydrogen in an internal-combustion engine is not very efficient and, combined with the exorbitant energy costs of cryogenic hydrogen, such architecture is a lousy deal in terms of well-to-wheel efficiency. Meanwhile, cryogenic hydrogen is spooky stuff. Given my teenage son's anguished relationship with the simple-to-operate toilet seat, I would rather him not pump a pressurized liquid at minus 253 degrees Kelvin.

The good news is that after years in the cosmic shadow of Detroit, the L.A. Auto Show has a new home on the calendar; the 2007 edition will be in November, avoiding the intramural conflict with Detroit. This is an opportunity to recast the show in light of the region's progressive environmental spirit. After all, California is the first state in the nation to attempt to regulate greenhouse gas emissions from transportation, and for its trouble is being sued by the automakers. Los Angeles has some of the worst air pollution in the country. We spend precious tax dollars on a hydrogen infrastructure. It only makes sense for manufacturers to showcase green technology here.

Not that the current L.A. show is completely bereft of green. Consider, for example, the 2006 Audi A3 Sportback. This tautly styled, four-door Euro hatchback would have been unmarketable in the United States only three years ago, but that was before Mini, which invalidated the notion that Americans wouldn't buy small cars. The A3 Sportback is powered by a new, thrifty and powerful direct-injection engine, a 2.0-liter turbo (197 hp), linked to a six-speed manual. Sounds like fun.

*Electric Avenue*

Perhaps the greenest technology at the show is not a fuel cell, an engine or a transmission. It's the lane-departure warning (LDW) system debuting as an option on the 2005 Infiniti FX45. This optically based system warns the driver when the car begins to drift out of its lane without a turn signal indicated -- and yes, Libertarians, you can turn it off.

LDW systems have been available for years in Japan and are overdue here; by some estimates, accidents caused by inadvertent lane departure account for more than half the automotive fatalities in the United States.

Next year Volvo will introduce its Blind Spot Information System (BLIS) that uses cameras on the side mirrors to alert drivers to objects they might not see.

So what's so green? Each of these technologies is a step toward intelligent vehicle/highway systems (IVHS), as is range-keeping cruise control, available now on many luxury cars. In Japan, Toyota sells the Majesta, a luxury sedan with Vehicle Dynamics Integrated Management, orchestrating the vehicle's brakes, steering, stability and traction control with radar-ranging and camera sensors, a process called sensor data fusion.

Combined with drive-by-wire steering, throttle and braking, these safety systems now make it possible to put large numbers of commuting automobiles under centralized command, safely expediting traffic, greatly reducing the gas-wasting stop-and-go of rush-hour traffic and improving air quality.

It is more than a utopian, city-of-the-future vision à la Norman Bel Geddes. Such electronic crash-proofing would allow designers to think in radically different terms about issues such as vehicle weight, structure, packaging and compatibility.

The automobile need not be designed as a heavy, super-resilient steel box girded to run into things. Intelligent vehicle and electronic crash-proofing - with its implications for automotive design and materials - seems a natural adjunct to alt-fuel propulsion.

*Golden State warriors*
However, this edition of the L.A. Auto Show sticks pretty close to the script as an auto show for the hyper-indulged sybarites of left-coast society. Please enjoy the Ferrari Superamerica, a retractable-hardtop variant of the front-engine, 12-cylinder 575 Maranello with a photo chromatic glass roof that darkens at the twist of a knob - mood lighting, as if anyone needed help getting in the mood in a Ferrari.

Also debuting is the convertible version of the new Ford Mustang, a gorgeous four-seat ragtop that, with a 300-horsepower V8 under the nostalgia-styled bonnet, sells for a nice round $30,000. Speaking of nostalgia, Chevrolet unveiled its HHR mini-wagon in Los Angeles, with styling drawn from the '49 Suburban and splayed over the same platform as the new Cobalt. The HHR - it stands for "Heritage High Roof," though "Heavy Handed Retro" works too - looks like a fit and fun family runabout, powered by either a 2.2- or 2.4-liter Ecotec engine (140 hp and 170 hp, respectively).

A redesigned Porsche Boxster, a new Viper Coupe, a Mercedes-Benz CLS55 with the space-warp technology from the AMG performance division. There are a lot of L.A.-centric automobiles on display. Think of it as a preview of the Ivy valet parking lot 12 months hence. It's a good show for imagining the short-term future of the city's car ecology. As for the long term: answer unclear, ask again.

Bakersfield Californian, Letter to the Editor

Wednesday, Jan. 12, 2005

No-burn policy rapped

A significant revelation can be drawn from the statement made by an air district representative in a recent news story.

In defense of their inaccurate forecasting, he claims implementation of the no-burn rule actually helps keep the air from reaching unhealthy levels, implying that an anticipated reduction in fireplace use fully accounts for all forecasting discrepancies.

However, what he does not disclose and what cannot be accounted for are errors made in the other direction when the district predicts discouraged days that actually turn out to be no-burn days that occurs more frequently at a rate of five to one last year. 

Because a predicted discouraged day could not have increased fireplace use, it is absurd to suggest that on one hand mispredicted no-burn days were the result of restrictions, while conceding on the other that missed no-burn days were the product of incorrect forecasting. So, we can only conclude that all discrepancies are due to inaccurate forecasting, which makes the air district official's claim incorrect.

But more important, this plainly reveals that fireplace use cannot be the controlling source of our air pollution.

Aside from this common-sense conclusion, you have to wonder why we as the electorate continue to allow these inept, power-hungry bureaucrats to systematically deteriorate the quality of our lives, arrogantly denying us the enjoyment of fireplace use while deceptively refusing to address the real source of our air pollution.

-- KEN GONDER, Bakersfield