

MotorWeek Transcripts FYI ‘Project Driveway Fuel Cell’

JOHN DAVIS: A lot of work is underway to develop vehicles powered by eco-friendly hydrogen fuel cells. But before fuel-cell vehicles can go on sale, auto makers have to make sure they are practical. And that is just what General Motors is doing with “project driveway”.

The idea? Place a fleet of 100 fuel cell electric vehicles in the hands of the public to see how they will perform as daily drivers. And who better to get the behind the wheel than our own FYI reporter Yolanda Vazquez.

YOLANDA VAZQUEZ: Nick Williams has become somewhat of a celebrity these days – thanks in part to the Chevrolet Equinox Fuel-Cell vehicle parked outside his home.

NICK WILLIAMS, AUTOMOTIVE ENTHUSIAST: I’ve had people come by my house knock on the door and ask me what the heck is in my driveway.

VAZQUEZ: The Washington, DC resident likes to take his new car out for a spin, but he can barely make it home without being stopped by passersby.

LADY IN CAR: Do you work for GM?

WILLIAMS: No, no – I’m a civilian – I’m just testing this – that’s all.

VAZQUEZ: Williams is one of nearly 3,000 thousand people chosen to participate in GM’s Project Driveway – a two-and-a-half year long “market test” that puts an Equinox Fuel-Cell prototype in the hands of everyday drivers.

MONICA MURPHY, DRIVER RELATIONSHIP MANAGER, GENERAL MOTORS: We’re launching more than 100 of these vehicles on the streets of Washington, DC, right where we are now; and Los Angeles and New York.

VAZQUEZ: Manager Monica Murphy says GM is looking for feedback on a number of things.

MURPHY: Do people like the way it starts? You have a few pauses. What about functionality of it in a small crossover? Do we like that? What about the noises and the sounds that you hear because there’re slightly different then what you hear in your gas engine vehicle of today.

VAZQUEZ: Murphy shows me some of those differences. For starters, there's a larger grille with wide front air vents. This allows GM's fourth generation fuel cell stack to operate more efficiently. Instead of your typical gas tank, there's a hydrogen line that's used to fill three hydrogen tanks onboard.

MURPHY: And the whole fueling process takes 5 or 6 minutes. It's not that much different than normal vehicle.

VAZQUEZ: Since zero emissions is the name of the game – the tailpipe has been replaced by these four open ports.

MURPHY: What we have as the byproduct of the fuel cell is heat and water and that comes out here as warm water vapor mist.

VAZQUEZ: This power flow diagram – with colorful moving dots – shows how the fuel cell onboard creates electricity through a chemical process.

MURPHY: And they're flowing out of fuel stack down to drive motor and that's propelling the vehicle.

VAZQUEZ: Keith Cole, GM's Director of Legislative and Regulatory Affairs, says the science behind fuel-cell technology is nothing new – it's the practical, everyday application that has yet to be perfected.

KEITH COLE, DIRECTOR OF LEGISLATIVE AND REGULATORY AFFAIRS, GENERAL MOTORS: Making that a reality is very complex – and hundreds of millions of dollars and years and years of development.

THOMAS ALBERT, PROJECT DRIVEWAY PARTICIPANT: I'm an engineer and it's kind of fun playing with new technology and this is some of the newest technology you can have in a car.

VAZQUEZ: Thomas Albert signed up for the project to get a first hand look at a vehicle that may one day revolutionize our transportation needs.

ALBERT: I think it's very important with price of gasoline now that we try to find alternative ways to fuel our cars and transport goods around the country.

VAZQUEZ: The longtime automotive enthusiast spent the first few days getting used to the subtle differences of a fuel cell. For example the jet-engine-like sound the car makes when you first turn it on

Instead of a tach, there's a kilowatt gauge. The letter "h" replaces "e" and "f" on the fuel gauge – and speaking of fuel – Albert says the data hookup and hydrogen pump line at the only filling station in DC requires little effort.

ALBERT: And the pump and the car talk back and forth and tell you what needs to happen next

VAZQUEZ: And like Williams, he too, has been bombarded with questions.

ALBERT: Let me get you a flyer.

VAZQUEZ: By inquisitive consumers.

ALBERT: How does it run? Is it quiet? How do I like it? Is it fulfilling the needs I have as an average user? And so far it has.

VAZQUEZ: There's no doubt that hydrogen fuel-cell power is here and here to stay – but issues involving cost durability and infrastructure make this emerging technology a bit more difficult to implement on a broader scale. GM is fully aware of these challenges and they're working hard to find the right solutions.

COLE: We don't underestimate the challenges. But as I say we've been working at this for a number of years and we see a line of sight to progress to that generation of fuel cells that will be commercially viable.

VAZQUEZ: To help make that dream a reality, Williams writes about his fuel cell experience on his own personal blog.

VAZQUEZ: The information is reviewed by GM as part of their ongoing research and development.

WILLIAMS: We really do have to investigate these new technologies so being part of that effort is a lot of fun to me, I think it's very important.

VAZQUEZ: And like anyone with his superstar status Williams continues to spread the word ...

WILLIAMS: This produces water vapor.

VAZQUEZ: ... about a real-world vehicle that could diversify our energy needs and reduce our dependence on imported oil.

WILLIAMS: Sooner we get into new technology; drive it around, kick the tires the better for the nation, the better for the world. And I'm not raising the flags, I'm not overly patriotic or anything like that; but I just think that this is the right thing to do.