Hydrogen-Electric Hybrid Car Planned

Alternate Energy Corporation in association with Feel Good Cars to produce affordable vehicle that operates not on fossil fuel but water.

LAS VEGAS, NV (PRWEB) June 11, 2004 -- ake one all-electric vehicle, add an alternator to keep the battery charged, powered by an onboard internal combustion engine that runs on hydrogen, and top it off with an onboard hydrogen generating system powered by water, and you have the dream combination -- coming soon.

Alternate Energy Corporation (AEC), ticker symbol ARGY, announced Tuesday that they, together with Feel Good Cars Inc. and others, intend to produce a prototype hydrogen powered internal combustion engine electric vehicle.

With twelve prototype all-electric urban low speed vehicles on the road, Feel Good Cars (FGC) is preparing for production in September of this year, with two thousand in the first year, according to Ian Clifford, President of FGC. The ZENNÂ plant is capable of manufacturing 10,000 cars a year.

Feel Good Cars intends to provide the platform and technical know-how relative to their ZENNÂ electric technology, which stands for "Zero Emissions No Noise."

Limited to 25 miles per hour, the ZENNÂ is a city-driving-only vehicle. As a low speed vehicle (LSV), the ZENNÂ is governed by special licensing and registration stipulations that vary from state to state in the U.S.

Alternate Energy Corp (AEC) specializes in making hydrogen on the fly for a hydrogen-powered back-up power system for industries, business, and home. In this, their main project, they use a Comment: Ford 4.9-liter truck engine that is designed to run on hydrogen. They expect to be in production of these units also by the end of the year.

Now that they have met each other, AEC plans to retrofit a ZENNÂ so it will run with electricity produced from an on-board 3-HP internal combustion engine that runs on hydrogen that is produced on the fly from water. They estimate that there will be not only enough electricity to recharge the battery, but also to run the motors.

Their objective is a hydrogen-from-water powered car that can be produced at a price affordable to middle income households.

"What comes out the tail pipe is a mist of water," said Blaine Froats, Chairman of AEC. "For every gallon of hydrogen fuel in, you get one gallon of water vapor out."

Clifford estimated that the hybrid hydrogen-electric vehicle they are producing in associate with AEC will be ready for initial on-road testing in early 2005. Froats expects that AEC can meet that schedule. The AEC press release was even more ambitious, envisioning a demo unit by the end of this year.

"All drive components are ready to go," said Clifford.

"Traditionally, the problem with hydrogen systems is in being able to store it," he said. "The low pressure

hydrogen-on-demand system [by AEC] makes a lot of problems go away. We are very excited about it."

"The internal combustion engine is a no-brainer, the drive motors are there," said Froats. "We know from our research and development findings that our on-board hydrogen generation system can economically produce the required hydrogen."

"The complexity of the project is in the electrical side of things," he said. "When the battery has enough charge, the generator needs to shut off. Regulating that properly can be a bit tricky."

The proprietary generator takes about six minutes to begin producing hydrogen from water, to run the alternator. It takes about three minutes to stop running.

The battery they anticipates using can run the car for about 6-7 minutes before requiring charge. "This is more than ample time for [the hydrogen generator] to be up and going", said Froats.

According to their press release issued yesterday, they anticipate that "the project can provide an alternative to large electric vehicle battery systems and thereby eliminate the need to recharge via electricity produced from the burning of fossil fuels." Downtime attributed to recharging goes away.

AEC recently demonstrated this hybrid approach on a 1 kilowatt Astris Golf Cart with onboard fuel cell. "They needed exactly 10 liters of hydrogen per minute, and we delivered bang on", said Froats. The ZENNÂ□ will require about 30 liters of hydrogen per minute.

The secret of AEC's propriety technology for generating hydrogen from water is found in the composition of a special alloy that emits bubbles of hydrogen when immersed in water. Separate the alloy from the water, and the bubbles stop.

The consumption of water in the process is negligible.

The limiting factor is that the alloy is gradually spent in a chemical process that results in an inert substance. So the alloy needs to be replaced in the system. In tests, the alloy produced hydrogen for 60 days before it began to cease production. Another test, by the inventor, who does not wish to be known to the public, ran for 90 days. A major testing lab is in process of running a wide array of tests to characterize the system capabilities.

"We are presently discussing various ways we might address this," said Froats. "One idea is to use pellets that could be cycled through."

"If you think about it, 60 days is a long time to be driving straight without ever stopping," said Froats.

The 3-HP internal combustion engine that runs on hydrogen was also developed by an engineer formerly with a major motor company. The alternator is also an integral part of the internal combustion engine developed by the same team. AEC recently acquired the rights to use the proprietary hydrogen technology to power an internal combustion engine.

"This combination will give us a strong market edge not just here but in many applications," said Froats.

AEC believes that the initial sales price of the vehicle should not be overburdened by the use of the new

technology and that the operating cost should be less than the existing cost of gasoline.

The above story was composed by Sterling D. Allan of Pure Energy Systems and posted with photos and links here:
http://pesn.com/2004/06/10/HydrogenElectricCar/

RSS XML Feed for Pure Energy Systems News:
http://pureenergysystems.com/news/rss

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Alternate Energy Corporation
www.cleanwatts.com

Ticker Symbol for Alternate Energy Corporation: ARGY
http://finance.yahoo.com/l?s=ARGY&t=S&m=US

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