

NHTSA looking to implement new noise enhancement rules for electric vehicles

July 13 2011, by Bob Yirka

(PhysOrg.com) -- The U.S. National Highway Traffic Safety Administration (NHTSA) announced on July 7, that it plans to implement new regulations requiring electric vehicles to emit some as yet undesignated "noise" to warn pedestrians of its approach. This move comes on the heels of passage, by Congress, of the Pedestrian Safety Enhancement Act of 2010, which requires the NHTSA to take action to protect pedestrians from the nearly noiseless electric (and hybrid) vehicles that lawmakers believe pose a hazard to unsuspecting people crossing roads, especially those with hearing impairments.

The legislation has come about as a result of two studies that indicated that [pedestrians](#) might be at increased risk of being run over by [electric vehicles](#). The first, conducted in 2008 by Lawrence Rosenblum, a University of California perceptual psychologist, showed that subjects wearing blindfolds were able to hear a Honda Accord with a gas engine approaching from as far away as 36 feet, but were only able to hear a [Toyota Prius](#) (hybrid) when it drew as near as 11 feet.

In the other study, done by the NHTSA itself, research indicated that there was a higher percentage rate for electric vehicles running into pedestrians, than gas powered models.

And while some may debate the accuracy of the research (the NHTSA study used data from just 12 states and only for one year) or the degree to which electric vehicles actually pose a risk, the bottom line, is that new regulations are very likely going to be implemented, a draft standard

will be issued in 2012, with the new rules going into effect in 2015.

Thus, the issue now is just what sort of “noise” will the car manufacturers be required to add. Some, such as the Nissan Leaf, already make a sort of whoosh sound, and Ford is opting for a crowd sourced option that will hopefully come up with a sound that the majority of electric vehicle owners won’t hate. All this might be moot however if the NHTSA picks a noise on its own. Also an issue is whether such cars would be required to make the noise all the time, or just during slow driving when it more likely matters. They could also decide to add different noises for different activities, such as when a vehicle is moving in reverse or turning, a likely possibility since the legislation spurring them to action in the first place also applies to light and low-speed vehicles, motorcycles, buses, and heavy-duty trucks.

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